

THE JUNIOR COLLEGE JOURNAL

UNDER JOINT EDITORIAL AUSPICES OF THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES AND THE SCHOOL OF EDUCATION OF STANFORD UNIVERSITY. . . MEMBER THE EDUCATIONAL PRESS ASSOCIATION OF AMERICA

Vol. I

MARCH 1931

No. 6

Retrospect and Prospect

[EDITORIAL]

At the recent meeting of the American Association of Junior Colleges in Berkeley, California, with an attendance of more than two hundred, representing all types of junior colleges in the United States and from other fields of education as well, an air of assurance prevailed as to the vitality and permanence of the junior college movement, such as we have not witnessed in any previous meeting.

From the first informal meeting of junior college executives in 1920 through the eleven annual conventions of the American Association which have followed, there has been a steady increase in attendance, a tendency toward clearer statement of functions, a widening variation in types of junior colleges and yet a growing unity of purpose, less of timid subservience to tradition, a gradual raising of standards, and a most gratifying development of respect for the junior college as an important unit in the educational system of America.

The active growth of the junior college began about 1900. According to Dr. Doak S. Campbell, there were no public junior colleges in the United States at that time and only seven private institutions. During the next fifteen years, only twenty-two public junior colleges were or-

ganized; but after that date the number of such colleges doubled each period of five years, until on January 1, 1931, the total number in the United States was 178. The number of private junior colleges has increased steadily since 1900 at an approximate rate of ten per cent each year over the number of the previous year. The final count in Dr. Campbell's Directory, published in the January issue of the *Junior College Journal*, is 258. This is almost three times the number of private junior colleges that were scattered throughout the United States, largely in the central and southern states, fifteen years ago. Many types of junior colleges have developed, depending upon the basis of support, the functions that have been emphasized, and the number of years of work included in their curricula.

This does not mean that educators in the junior college field have defined in a final and exact way what the junior college is, whether it is to be a two- or four-year institution, or possibly three; whether the chief function will be to prepare graduates for advanced standing in four-year colleges and universities, or in some sense to prepare them for life. For many years great diversity seems probable. Each junior

college will attempt to adapt itself to the needs of the community or the constituency which it serves. Whether a junior college student is to take a preparatory or a terminal course, the work of the last two years will correspond in advancement and extent to that of the freshman and sophomore years of the four-year institution. If we think of the junior college as a four-year unit it occupies approximately the field of the traditional college of sixty or seventy-five years ago.

Fortunately, the junior college is in its youth and is not bound by the "dead hand of tradition." It is in a period of experimentation and research, of varying functions and changing standards, which offer a most interesting challenge to all executives and students in this field.

One change in standards, adopted at the Berkeley Convention, will illustrate both the open-mindedness of this organization and its determination that standards shall not be lowered at any point. The previous standard relating to financial support required a minimum annual income for operating educational expenses of \$20,000 for the two-year junior college, of which ordinarily not less than \$10,000 should be derived from stable sources, such as permanent endowment, public or church support. This standard was supplemented as follows: "A junior college that does not have such support from endowment, church, state, or public sources, must show, for a period of three or more consecutive years immediately preceding its application for accrediting, that its charges and expenditures are such as to show a minimum average annual net surplus of \$10,000."

By tradition students have not paid in full for their education and it has been agreed that additional support was necessary from one of the sources indicated. In recent years, however, much thought has been given to the unsatisfactory results of this system by which such financial aid has been shared equally by the deserving and undeserving; by students who are abundantly able to pay in full for their education and by others who actually need help. The thought is developing that all assistance, from whatever source, should be used exclusively, if possible, for worthy students who could not secure an education without it, and that those who are financially able should pay their own way. There is little satisfaction in giving assistance, through contributions to endowment or church or through taxation, to the son or daughter of a man who is richly blessed with this world's goods. The American Association of Junior Colleges recognizes not only the legitimacy but the desirability of having certain colleges in which charges are such that no outside financial support will ordinarily be required. It appears from the success of many such institutions that there are patrons who subscribe to this theory, who are willing to pay their own way and to help make such undertakings successful.

A word of warning has been sounded and will bear repetition that no junior college should be organized until adequate funds for buildings and equipment, and sufficient income for employment of faculty and the maintenance of proper standards are assured. Com-

munity pride or the ambition of a local school administrator should not result in the hasty establishment of a public junior college before a careful study has been made of the field from which patronage will be drawn and upon which the college can depend with reasonable certainty for continued support. Similar precaution should be exercised in the establishment or in the enlargement of a private junior college. It seems wise to pause after such phenomenal growth as the junior college has experienced, especially during the last decade, for a period of improvement in quality and for the more complete solution of many important problems.

The serious question confronts junior college executives whether more terminal courses of a semi-professional, vocational, or general cultural type should not be provided. What functions should be pre-eminent? How should curricula be modified? How large can classes safely be? What should be the maximum teaching load? What minimum training should be required for the librarian? What number of books and what process of selection and classification make a satisfactory library? These are a few of the many questions that are receiving careful study.

The American Association is most fortunate in the establishment within the past four months of the *Junior College Journal*. We shall have brought together month by month the most worth-while contributions to junior college literature, as they appear in other educational magazines, and as they result from experience, study, and research on the part of educators of all classes, now vitally interested in this field.

We may look back with deep satisfaction upon the progress that has been made and upon precedents that have been established. We can go forward with renewed assurance and courage to the solution of our many problems.

RICHARD G. COX

THE JOURNAL'S FIELD

The administrator of one of the New England junior colleges writes as follows:

At the annual meeting of my Board of Trustees on Monday, competent comment from men and women not in the educational profession as such but each of whom had had a copy of the original issue of the *Junior College Journal* was explicit that they believed that such an undertaking was of immeasurable value to the movement as a whole and particularly in New England, if boards of directors and other influential people, not forgetting deans and chairmen of admission in senior colleges, could have an occasional issue. They felt that no such person could fail to be impressed with the solidity and reliability of the movement being integrated through the efforts of the *Journal*.

JUNIOR COLLEGE LIBRARIES

Under the chairmanship of Miss Katherine Steele, of San Mateo Junior College, the junior college committee of the northern section of the California School Library Association has compiled a bibliography of twenty-seven titles on junior college libraries. Most of the titles are taken from *United States Office of Education Bulletin*, 1930, No. 2, "Bibliography on Junior Colleges."

Need of Public Junior Colleges in Utah

BRUCE E. MILLIKIN*

The public junior college is a pertinent question in Utah. Two bills for the establishment of junior colleges in the state were presented in the legislative session of January, 1929. One was prompted by the fact that the University of Utah anticipated inadequate facilities for accepting the double graduating class of the Salt Lake City high schools—due to acceleration of the first class on the eleven-year curriculum—and that it seemed necessary to establish immediately a junior college in connection with the city senior high schools. For such an institution, state aid was asked. Owing to confusion of the bills and lack of information, the legislature failed to give the matter consideration. Governor George H. Dern called a special session of the legislature in January of 1930 for the primary purpose of revising the taxation system of the state, but he deemed the college situation sufficiently imminent that he included provision for the establishment of junior colleges as one of the six or eight items that needed consideration at the special session. However, legal duration of the session expired before the matter was considered.

PUBLIC ATTITUDE TOWARD EDUCATION

The people of Utah are and have been thoroughly devoted to education. The early Mormon pioneers

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planned for permanency and at the earliest opportunity established an extensive and unified system of church schools. Within thirteen years after the first migration into the Salt Lake Valley, the system of elementary and secondary schools was extended by the establishment of the University of Deseret, now the University of Utah. When the state was admitted to the Union in 1896, a unified system of education was provided for by the following constitutional clause:

The public-school system shall include kindergarten schools, common schools (consisting of primary and grammar schools), high schools, and agricultural college, a university, and such other schools as the legislature may establish.

In 1920 slightly over one-third of the total public expenditure, state and local, was for education; in this ratio Utah was excelled only by Montana. While the state ranked thirty-fourth in per capita income, it ranked sixth in its per capita expenditure for education. Salt Lake City ranked second among the larger cities of the country in the proportion of children and young people attending school, and in literacy. The Survey of Education of Utah says:

"The state ranks high with respect to the per cent of children of school age enrolled and with respect to average daily attendance. . . .

"Utah has succeeded in extending secondary education to a higher per-

centage of the secondary-school population than has any other state."¹

In 1927-28, 93.3 per cent of the school population of 143,811 was enrolled in full-time school, there were but 83 one-room schools in the state, and 11 per cent of the school enrollment of the state received benefits of transportation to and from school.² The people of Utah have done well by their public schools.

LIMITATIONS AND OPPORTUNITIES

Nature has endowed Utah with a number of characteristics inhospitable to man. The Salt Lake Valley is an oasis in an arid and semi-arid region that extends for several hundreds of miles. A large portion of the state overlays a mountainous and high plateau territory and in the western part it includes the Great Salt Desert. On account of great natural advantages, most of the people of Utah live in the drainage section between the Wasatch Mountains and Great Salt Lake. According to the census of 1930 nearly one-third of the population of the state is located in Salt Lake City and vicinity. In five counties, stretching a distance of 125 miles north and south with an average width of 30 miles and constituting 5.8 per cent of the area of the state, lives 66.9 per cent of the people. This region averages 105 persons to the square mile, but in the remaining 94.2 per cent of the area of the state there are but 2.1 persons per square mile. The state as

a whole in 1930 averaged 6.1 to the square mile, the exact equivalent of the density of population of the United States in 1800.

In that Utah is comparatively a new state, that it has relatively a large area, and that its density of population is low, a prediction of a steady population increase for some time to come might readily be made; but a study of census trends indicates that Utah will probably not increase over 15 per cent during the next quarter of a century and shows that over one-third of the counties of the state lost in population during the past decade and that less than one-half of the counties made a gain of more than 3 per cent. The tendency of the shift is indicated by the fact that Salt Lake County increased in population 21.9 per cent. Figures recently furnished by the Department of Commerce show that but 3.3 per cent of the area of the state is under irrigation and that the irrigation acreage decreased 26.1 per cent during the decade.

A general survey of Utah to determine the outstanding limitations and opportunities for a system of public junior colleges may be summarized as follows:

1. The population in all counties other than those in and bordering on the north central valley is too sparse to support junior colleges.

2. The character of the future industries of Utah is problematical, except in the populous and well-established irrigation and transportation centers.

3. The excellent state highway system is an important factor in favor of the establishment of junior colleges.

¹ *Survey of Education in Utah*, United States Bureau of Education Bulletin (1926) Number 18, pp. 82, 210.

² *Report of State Superintendent of Public Instruction*, of Utah, 1928, pp. 228, 240.

4. No junior college should be established in the state until a thorough survey of the possibilities and

limitations of each community anticipating the establishment of such an institution has been made.

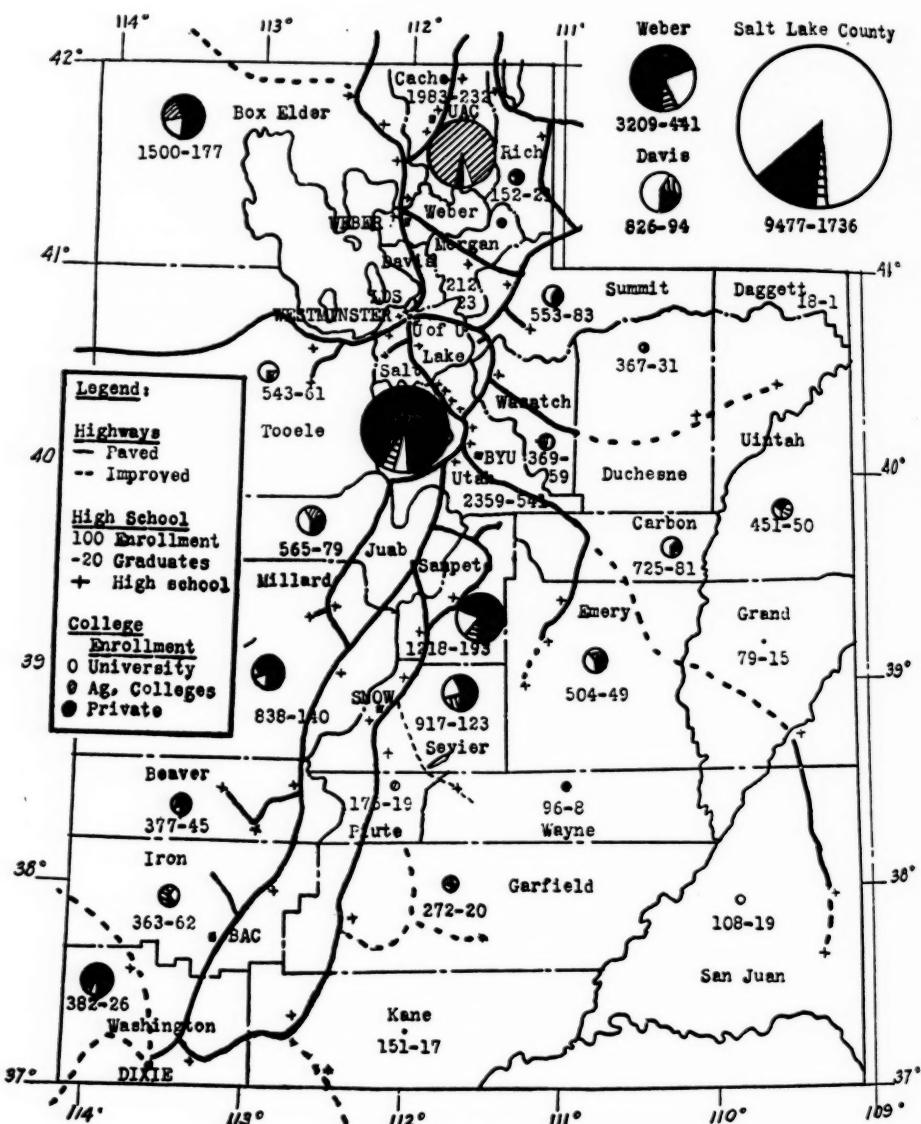


FIG. 1.—Utah highways and high schools, high-school enrollment and graduates by counties, and source of college enrollment 1928-29. (Through a draftsman's error Box Elder County is shown with over half its students attending private institutions. It should have shown over half attending the Agricultural College.)

UTAH EDUCATIONAL INSTITUTIONS

In addition to strong public sentiment in education, an effective elementary and secondary system of public schools is a prerequisite to the establishment of junior colleges. Other things being equal, length of school term, proportion of children of school age enrolled, and high average daily attendance are indices of the quality of schools. With respect to the length of the school term, Utah ranks a little below the average for the country as a whole; but the schools of the state enrolled 25.7 per cent of her total population in 1927-28 as compared with 21 per cent in the United States, and ranked eighth among the states in the number attending daily per hundred enrollment and fifth in percentage of total population enrolled in secondary schools.³

The unit of administration of the schools of Utah, outside the cities of the first class, is unlike that of any other state. In 22 of the 29 counties, the county-wide unit is the basis of organization. Five counties are divided into five city units and ten county districts of the first class. The total number of school districts in the state is forty, a situation exceptionally favorable to the establishment of junior colleges. Eighty-six schools in the state are doing high-school work. A study of the enrollments in 1928-29 and the number of graduates in each district during a six-year period indicates that less than a dozen districts enroll and graduate students in sufficient numbers to warrant maintenance of a district jun-

ior college registering one hundred or more students.

The *Survey of Education in Utah* comments upon the characteristics of higher education in the state as follows:

It is evident that in Utah relatively a large number of young people of the state attend college, that women have a higher percentage of representation in college than elsewhere, and relatively a high percentage of students attend college in the home state.⁴

Table I (p. 348) lists the colleges of the state, their location, rank, source of support, enrollment in 1928-29, and the proportion of enrollment in each from the state.⁵

A study of these enrollments shows that 65 per cent of the total attended the University and the Agricultural Colleges, and that 33.6 per cent of the Utah students attended private colleges. Sixty-five per cent of the students in the University lived in Salt Lake City and 70 per cent in the county. Of the enrollment of the six colleges located in cities of some size, 52 per cent attended the local institution and 67 per cent enrolled in the nine colleges of the state lived in the county in which the institution is located. It is evident that in Utah the proximity of a higher institution of learning tends to popularize college enrollment.

The general character of the work taken in the four-year colleges of the state is, with some accuracy, indicated by the enrollments in college departments. The number of students following academic courses

³ Page 234.

⁵ From data furnished by the office of the Superintendent of Public Instruction of Utah.

³ *Statistics of State School Systems*, Bureau of Education Bulletin (1930), Number 5, pp. 17, 23.

is relatively large, and the number in professional courses relatively small, except in education and commerce. There is apparently little offered of a semi-professional nature in the four-year colleges. Likewise, a study of the curriculum offering of the junior colleges of the

cation of the Church of Latter Day Saints. It is directly to the point.

The General Board of Education has announced the policy of withdrawal from the field of secular education, except that the B.Y.U.⁶ will be continued. Therefore, sooner or later the junior colleges of the Church from Idaho

TABLE I
UTAH COLLEGES AND ENROLLMENTS, 1928-29

Institution	Location	Rank	Denomination	Enrollment	Percentage from State
				Total State	
<i>Public</i>					
University of Utah.....	Salt Lake City	4-yr. and gr.	.....	3,132	2,870 91
Utah Agricultural College.....	Logan	4-yr. and gr.	.....	1,181*	897 76
Branch Agricultural College....	Cedar City	Junior	.....	96	100
<i>Private</i>					
Brigham Young University....	Provo	4-yr. and gr.	Mormon	1,453	1,229 80
Weber College	Ogden	Junior	Mormon	423	423 100
Snow College	Ephraim	Junior	Mormon	219	217 99
L.D.S. College	Salt Lake City	Junior	Mormon	113	113 100
Dixie College	St. George	Junior	Mormon	88	71 80
Westminster College	Salt Lake City	Junior	Presbyterian	63	53 84

* Not including 113 "from other schools."

state indicates that it is largely academic with little opportunity for vocational selection.

NEED FOR PUBLIC JUNIOR COLLEGES

There is apparently large opportunity for the junior college in Utah. This institution is likely not only to popularize the "cultural" in college work by bringing the college closer to the people, but there is a large field for semi-professional work that is hardly touched. Furthermore, the announced intention of the withdrawal of the Mormon Church from the junior college field creates a critical need for public institutions. The following paragraph is from a letter addressed to the writer on July 14, 1930, by Commissioner Joseph F. Merrill, executive officer of the Department of Edu-

to Arizona inclusive, and also the L.D.S.⁷ College of Salt Lake City will discontinue under church ownership and management. Just when this ownership will cease is a matter of doubt. The local boards of control want the General Board to pledge the maintenance of these colleges until the public is willing to take them over. This may be what will happen, though the General Board will give no such pledge. Educational campaigns in Idaho, Utah, and Arizona are now going forward to create public sentiment sufficiently strong so that the legislature from each state will during the coming winter pass the necessary legislation to enable the public to assume the ownership and management of what are now Church junior colleges—Ricks, Weber, Snow, and Gila. The General Board has announced that it

⁶ Brigham Young University.

⁷ Latter Day Saints.

will transfer these institutions to public control, selling the property at a reasonable sum, asking in no case more than twenty per cent of the property value. If the communities in which these junior colleges exist show no desire to assume ownership, they will be closed. The General Board has no desire whatsoever to maintain institutions in competition with the public school system. The Church believes in the public schools from the kindergarten to the university and wants to give its undivided support to them.

Recently the announcement was made through the press that the L.D.S. College will close in 1931 and that the Church in 1933 will withdraw from the other institutions mentioned.

STUDY OF PARENTAL PREFERENCES

In an endeavor to determine the intentions of the parents of students in the high schools of Utah with reference to further education after graduation, a questionnaire was circulated through the high schools of the state to parents of seniors and juniors in January, 1930.

The questionnaire was prepared by a committee appointed by the State Board of Education to survey the junior college situation in Utah, under the chairmanship of Mr. I. L. Williamson, State High School Inspector, and was distributed from the State School Office. A letter explaining the purpose of the questionnaire and a statement defining the junior college and its functions, adapted from that of Dr. Walter C. Ells as used in the Siskiyou (California) County Survey, accompanied the questionnaire to each parent. By kindness of the committee, the original material was made available to the writer.

The parents of each senior and junior were asked the following question:

"After your son or daughter graduates from high school what is your present intention with regard to his or her further education in a higher institution?"

Parents were asked to indicate the answer that most nearly expressed their intention by checking one of the following statements:

- a) Fully expect him or her to continue in higher institution.
- b) Will probably enter advanced institution.
- c) Quite undecided as to whether he or she will continue education.
- d) Do not expect that he or she will continue education.

About 9,500 copies of the questionnaire were sent out, from which 5,688 replies were received. Forty-nine of eighty-six schools replied. On the basis of the enrollment of juniors and seniors in 1927-28, the most recent records available, replies were received from 57 per cent of the total. The variation is from none in six of the forty districts to very complete in as many more. A summary of intentions of higher education expressed by parents of juniors and seniors in Utah high schools, January, 1930, is given in Table II.

TABLE II
INTENTIONS CONCERNING HIGHER
EDUCATION

Answers	Entire Group	Percentage of Total
"Fully expect"	2,559	45
"Probably continue"	1,552	27
"Uncertain"	1,270	22
"No expectation"	307	6

Nearly one-half of the parents fully expect that their children will

continue to a higher education. If it is probable, as seems reasonable, that half of the number who replied "probably continue" and that a fourth of those who replied "uncertain" will send young people on to college, and this amount is added to the number "certain," the result is 64 per cent of the number of replies received. According to this, then, the reasonable expectation is that nearly two-thirds of the juniors and seniors in Utah high schools in 1930 will go on to a higher institution.

CHOICE OF INSTITUTION

Parents were also asked in the questionnaire to state, if they had expressed themselves as "fully" or "probably" expectant of sending the son or daughter to college, the choice of institution. The results are given in Table III. Over 30 per

TABLE III
COLLEGES SELECTED BY PARENTS

Institutions	Selected by
<i>Four-year colleges</i>	
University of Utah.....	1,294
Utah Agricultural College.....	380
Brigham Young University.....	363
<i>Junior colleges</i>	
Weber College	113
L.D.S. College	103
Branch Agricultural College.....	85
Snow College	77
Dixie College	8
Miscellaneous	405
Total	2,828

cent failed to answer the question concerning selection of a college, presumably because they were undecided. The University of Utah was selected by 46 per cent of parents naming an institution.

POSSIBLE ATTENDANCE

The questionnaire asked that parents check an answer to the following questions:

If there were a good junior college maintained within a reasonable distance of your home, near enough so that the student could return home each evening, would your son or daughter attend it?

A summary of the replies is given in Table IV.

TABLE IV

INTENTION OF ATTENDANCE AT JUNIOR COLLEGE IF ESTABLISHED

Answers	Entire Group	Percentage of Total
"Yes"	2,249	49
"Probably"	1,338	28
"Uncertain"	662	14
"No"	448	10
Total	4,697	100

Of 5,688 parents who replied to the questionnaire, 4,111 expressed definite or probable intention of sending a son or daughter to a higher educational institution, while 3,587 of the identical group expressed positive or probable preference for a junior college under the conditions set. Eighty-seven per cent as many parents show at least probable preference for the junior college as expressed at least probable intention of sending a student to college. From this point of view, the conclusion is surely valid that the portion of the public most directly concerned about future higher education in Utah has a very definite desire for junior colleges.

RURAL VERSUS URBAN SCHOOLS

An assumption that the desire on the part of parents for junior col-

leges would in large part prevail in rural communities distant from centers of higher education is logical. With this in mind, the replies from parents were classified as "urban" and "rural," one including replies from cities of the state (excepting Logan and including Granite district, closely adjoining Salt Lake City) and the other including replies from rural districts. The results are given in Table V.

TABLE V
NUMBER AND PERCENTAGE OF
PREFERENCES

Replies	Urban		Rural		Per- cent- age Urban	Per- cent- age Rural
	Urban	Rural	Urban	Rural		
"Yes"	1,036	1,213	44	52		
"Probably"	648	690	28	29.5		
"Undecided"	370	292	16	12.5		
"No"	299	149	12	6		
Totals ..	2,353	2,344	100	100		

Practically half are urban and half rural. Of the rural parents 81½ per cent expressed a preference for the junior college in terms of "yes" or "probably," while 72 per cent of the urban population gave the same answers. In other words, of eleven prospective college students in the country, parents would have nine of them attend a junior college; of eleven in the city, parents would send eight to the junior college. The difference is not as great as would reasonably be expected. City parents are only a little less desirous of having junior colleges than are rural parents.

COURSES DESIRED

The junior college offers two years of work above high school as a basis for specific preparation for life's work. Many students find a four-year university course unde-

sirable or impossible and need opportunity for finishing semi-professional or trade preparation in half the time.

In order that some concept of the type of junior college generally needed in Utah might be gained, a fourth portion of the questionnaire to parents made inquiry as to vocational choice in higher education. The question asked was as follows:

"If your son or daughter should attend a public junior college, which of the following courses do you plan to have him or her take?

- College preparatory
- Elementary engineering
- Business and commercial
- Mining
- Home economics
- Mechanical
- Agriculture
- Another course"

A summary of replies is given in Table VI.

TABLE VI
PROSPECTIVE JUNIOR COLLEGE COURSES
SELECTED

Courses	Number
1. Business and commerce	1,735
2. College preparatory	1,024
3. Home economics	468
4. Elementary engineering	418
5. Mechanical	397
6. Agriculture	249
7. Normal	176
8. Music	76
9. Art (design, commercial, china painting, cartooning)	49
10. Mining	40
11. Forestry	31
12. Nursing	28
13. Aviation	17
14. Physical education (teaching)	16
15. Drafting	15

Other vocations listed included architecture, pharmacy, interior decorating, journalism, beauty culture, cabinet making, dancing, radio, photography, printing, and telegraphy. Several professions were listed, all of which have been counted in the college preparatory course.

The validity of the list is questionable. The questionnaire suggested broad vocational lines but failed to suggest distinctly terminal courses. The list of parental selection of courses for their young people in junior college is, however, at least suggestive.

CRITERIA FOR ESTABLISHMENT

In the enthusiasm of a community for a junior college, there is grave danger that consideration of resources in student enrollment and finance receive inadequate attention. A small college involves limited curriculum offering and high per capita costs. Insufficient assessed valuation results in excessive taxation. After careful investigation of authoritative opinion and junior college history, the writer concludes that an effective junior college cannot be established in Utah with less than a contiguous high-school enrollment of 600, a junior college average daily attendance of 100, and an assessed valuation of \$12,000,000. Such lower standards as high-school enrollment of 500, prospective junior college enrollment of 100, and an assessed valuation of \$10,000,000 may justify an expert survey in recommending the establishment and maintenance of a junior college in Utah.

SUGGESTED CURRICULUM

In the establishment of a junior college it is necessary, since so large a proportion of students prepare for continuing to upper division university work, that certain courses be offered to meet the lower division requirements of the University of Utah to avoid loss of credit at the time of transfer. After compiling

the departmental requirements of the lower division of the University, the writer prepared a curriculum (Table VII) as a suggested basis for a junior college of 150 students. No provision was made for students in the two-year kindergarten diploma course or for second-year engineering, since facilities for a comparatively large number of courses in education and extensive shops could not be provided in a junior college of the size contemplated.

TABLE VII

SUGGESTED CURRICULUM*

Departments and Courses	Sem.- Hours	Total Hours
<i>English</i>		
Freshman composition	3-3	
Composition and rhetoric.....	2-2	
Literature, American	3-3	
Literature, English	3-3	22
Public speaking	2-2	4
<i>Social Sciences and History</i>		
Greek, Roman	3-3	
Modern, American	3-3	
Economics, principles	3-3	
Industrial development	3	
Sociology	3	27
<i>Natural Sciences</i>		
Biology	5	
Zoölogy	5	
Physics, elementary	3-3	
Physics, intermediate	4-4	
Chemistry, elementary	3-3	
Chemistry, intermediate	4-4	38
<i>Mathematics</i>		
Intermediate algebra	3	
Solid geometry	3	
Trigonometry	3	
College algebra	3	
Analytic geometry	4	
Calculus	3-3	22
<i>Modern Language</i>		
French, elementary	4-4	
French, intermediate	4-4	
Spanish, elementary	4-4	
Spanish, intermediate	4-4	32
<i>Business</i>		
Accounting	3-3	
Business organization and ad- ministration	3-3	

* For a junior college of 150 enrollment to meet lower-division requirements of the University of Utah.

TABLE VII—Continued

Departments and Courses	Sem.- Hours	Total Hours
Corporation finance	2	
Money and banking	3	
Business economics	2	
Shorthand	3-3	
Typewriting	2	27
<i>Home economics</i>		
Food selection	3	
Textiles	4	
Principles of garment-making..	3-3	
Home management	3	
Interior house design.....	3	19
<i>Agriculture</i>	4-4	8
<i>Music</i>		
Notation, sight singing.....	3	
Harmony	3	
Appreciation	1-1	8
<i>Art</i>		
Design	3	
Composition	2-2	7
<i>Engineering</i>		
Mechanical drawing	3-3	
Descriptive geometry	3	9
<i>Philosophy</i>		3
<i>Psychology</i>		
General	3	
Educational	3	6
<i>Physical Education</i>		
Hygiene	1	
Gymnasium	1-1	3
Total offering	235	

Based on freshman and sophomore enrollments at the University by departments in 1928-29, all students in the two classes totaling 1,944, except 62 kindergarten diploma students and 43 engineers (92 per cent) could have met lower-division requirements by means of the suggested junior college curriculum. Assuming that the teaching load of junior college instructors, in accordance with general practice, is 15 hours per week, the writer found it readily possible to program the suggested courses to 10 instructors with a margin of 65 semester-hours to allow for additional duplicate courses and courses desired by students. Should it be desirable to establish a junior college enrolling

100, the offering would of necessity be cut to about 175 semester-hours and the number of instructors to seven. The writer estimated that over 70 per cent of the students in such an institution making the same departmental selections as at the University could meet University lower-division requirements.

COSTS IN UTAH ESTIMATED

Valid statistics as to junior college maintenance costs are difficult to obtain. Private junior college finance generally involves subsidies and gifts, administration and support of public institutions are frequently interwoven with those of an associated high school, and size of institution is so variable a factor that data are generally not comparable. As the most definite means of determining junior college costs, the writer carefully estimated the cost of building and operating a junior college in Utah for 150 students. For ten instructors, eight classrooms would be sufficient to allow for some expansion. Estimates provided for a library and a combined auditorium and gymnasium. No provision was made for transportation. The estimate for capital outlay for such a plant would require a bond issue of \$140,000, for the interest and redemption of twenty-year bonds annually close to \$14,500, and for annual operating costs \$43,000. On the basis of a \$15,000,000 assessed valuation, the necessary annual rate of taxation for operating costs would be \$0.28 per hundred and for interest and bond redemption \$0.10—a total of \$0.38. With an enrollment of 150, the cost for current operation would be close to \$300 per student unit, and inclusive of interest and bond

redemption close to \$380. These figures compare favorably with authoritative estimates for cost-per-student in public junior colleges.

It is difficult indeed to determine when a particular school district in Utah is able to afford such additional funds as are involved in the establishment of a junior college. In that the assessed valuations of the several districts vary from about 40 to 75 per cent of the estimated true valuation, and in that in each district the legal taxation limit for school purposes depends upon whether the district is city or rural, upon the size of the school census per capita assessed valuation, and upon what the district tax limit was in 1922, neither the assessed valuation nor the margin between the actual taxation rate and the legal rate furnishes a valid basis for judgment. The best available means of determining ability to meet additional expense for school purposes seems to rest upon the relative rank of districts in "possible fund per child" under the particular taxation limits applying in each district. The State Department of Education has furnished these statistics for the school year 1929-30. The data furnish some striking differences in the amount of possible fund per child. Salt Lake City ranks ninth with a possible fund per child of \$48 and a levy of 10.6 mills and the city of Logan ranks thirty-third with a possible fund of \$26.14 and a tax levy of 14 mills. These differences seem to be significant, but they do not tell the whole story. Salt Lake City is assessed at about 70 per cent of its estimated real value and Logan at about 40 per cent. Recasting the possible fund per child on the basis of estimated

true valuation gives Salt Lake City a rank of seventeenth and Logan a rank of twentieth among the districts of the state—not a significant difference. A recasting of the possible fund per child in each of the several districts on the basis of the percentage ratio between assessed valuation and estimated true valuation as determined by the State Board of Estimates⁸ in 1925 (which have probably changed but little in the meantime) and a re-ranking probably give the best available means of determining the relative ability of each district to support any additional school facilities such as a junior college. The data, too lengthy to present here, served as an important factor in making recommendations for the establishment of junior colleges in certain districts in Utah.

STATE AID FOR JUNIOR COLLEGES

It is the accepted policy of every state in the Union that higher education is a state obligation, and it is a fair proposition that the state contribute as much per unit enrollment in the junior college as it does in the university lower division, provided the students pay tuition equivalent to that paid in the university and the local school district provides building and equipment facilities and the balance of necessary maintenance.

On this premise, the writer attempted to determine what the per capita lower-division participation in state support at the University of Utah is as a basis for establishing a justifiable figure for state aid of

⁸ *Survey of Education in Utah*, Bureau of Education Bulletin (1926), Number 18, p. 433.

junior colleges in Utah. The report of the Educational Finance Commission under the auspices of the American Council of Education presents a very complete study of "student clock-hour costs" in the several departments and divisions of ten representative institutions of higher education and concludes, "that the unit costs of the same kind of work in different institutions tend toward similar levels."⁹ With clock-hour costs at the University of Washington given,¹⁰ and used as a basis for computation, the writer determined that the per capita lower-division apportionment of state funds at the University of Utah in 1928-29 based on enrollments, was \$124 as compared with \$245 for that of upper division and graduate divisions. Based on these figures, a proposal for state aid of \$100 per student in average daily attendance is not unreasonable.

RECOMMENDATIONS FOR UTAH

The State Department of Education of Utah has established junior college standards that compare favorably with those of other state and college agencies. To complete the provisions under which public junior colleges may be most effectively organized in the state, the following recommendations are made:

1. That legal status for the organization of junior colleges as a part of the state school system be established by the legislature by providing for (a) Criteria in accordance with the following minima: high-school enrollment of 600, average daily attendance of 100, as-

sessed valuation of \$12,000,000; (b) The formation of junior college districts, whether located in the same or adjoining counties; (c) An impartial and expert survey under the auspices of the State Department of Education, together with the recommendation of the State Superintendent of Public Instruction, before any junior college may be established; (d) State aid for junior colleges of not less than \$100 per student in average daily attendance.

2. That the organization of a junior college as a department of or in conjunction with a high school is to be discouraged.

3. That the organization of a junior college that is not likely to attain an enrollment of 150 is not advisable.

4. That a conservative attitude should be maintained toward the establishment of a junior college where a four-year college or university is already in operation.

5. That the state is under no obligation to take over a private junior college; provision for taking over such an institution should be on the same basis as for the establishment of a junior college, *de novo*.

6. The present period of depression as to employment, agriculture, and mining in Utah is not an appropriate time for encouraging the establishment of junior colleges, though legal provision for their organization should be made as soon as possible.

ADVISABLE LOCATIONS

In accordance with the preceding recommendations, and with consideration of the comparable rankings of the several districts as to possible fund per child, the eventual estab-

⁹ E. B. Stevens and E. C. Elliot, *Unit Costs of Higher Education*, p. 129.

¹⁰ *Ibid.*, Table 94, p. 70.

lishment of a junior college in each of the following communities is held to be advisable. Each has excellent highway facilities for transportation of students.

1. Salt Lake City. Criteria for establishing and ability to support a junior college are amply met. The real need rests largely with the future policy of the University of Utah, located in Salt Lake City.

2. Ogden and Weber Districts, a union district identical with Weber County. In anticipation of the closing of Weber College, a movement is now on foot to establish a junior college. The need and ability to support such an institution justify its establishment.

3. Davis District, between Ogden and Salt Lake City. The high school enrolls over 800, and a high percentage of the graduates attend college. The ability to support a junior college seems but fair. In that the district high school is but sixteen miles from Ogden, the formation of a union district with Ogden and Weber districts is probably most advisable.

4. Box Elder District. The population in the eastern end is comparatively dense. Three high schools, within a span of 22 miles, enroll over 1,000, and 40 per cent attend college — two-thirds at the Utah Agricultural College. Funds seem ample for the establishment of a junior college.

5. Granite District, contiguous on the south of Salt Lake City. The need for a junior college is evident but funds are questionable. A union district with Salt Lake City would seem most advisable.

6. Jordan District, southern portion of Salt Lake County. This is the most wealthy district of the

state. It has a high-school population of about 900. Population is concentrated in the eastern and western portions, 16 miles apart. There is every evidence for a successful junior college.

7. Alpine District, next farther south than Jordan. It includes several thrifty towns, but ability to support additional schools is but fair. The district enrolls over 1,000 high-school pupils and over 50 per cent of the graduates attend college. This district needs a junior college but evidently its establishment depends upon liberal state aid.

8. North and South Sanpete Districts. Ephraim in Sanpete County is the site of Snow College. The district enrolls over 1,200 pupils. The county is static as to population increase. In so far as possible-fund-per-child is an index to ability to support a junior college, it is doubtfully advisable that the state take over Snow Junior College.

9. North and South Summit and Park City districts, located in mountain canyons 35 miles east of Salt Lake City, in wealthy mining districts. Until the recent decline in metal values there was evidence of ample means for support of a union district junior college. The high-school enrollment is over 900 but only one in four graduates attends college, perhaps a strong indication of the need for a junior college. Good highways are open practically all winter. The difficult problem of locating a junior college advantageously should be determined by an expert survey.

Other districts in the state are too sparsely settled or have too small a high-school enrollment to warrant consideration of establishing junior colleges.

The Junior College in State School Surveys

WILLIAM G. CARR*

About one hundred state school surveys of more or less extensive scope have been published. These constitute one of the primary sources of information concerning the theory and practice of state school administration. Since the survey and consultative staffs which make these investigations include outstanding leaders of importance in their respective professional fields, a comparison of the findings and recommendations of these surveys on any particular point offers a fruitful field for study.

In this article the findings with respect to junior colleges in seven recent state school surveys are presented. The surveys included are shown in Table I (p. 358). These seven surveys are geographically representative of the entire country. To save space in the discussion which follows they will be referred to simply as "the California survey," "the Texas survey," etc. The numbers assigned to the surveys in the first column of Table I will be used in making page references.¹

The nature and the amount of emphasis devoted to the junior college in any particular survey depends in part on the scope and purpose of the survey, in part on the

local situation, and in part, no doubt, on the particular interests of those responsible for the conduct of the study. The Texas and Massachusetts surveys each devote a complete and separate chapter to the junior college problem, while in the California study references to the junior college occur on nearly every page. The New Jersey and West Virginia surveys give a section of a chapter to the junior college. In the Mississippi and Utah surveys the problem is given only brief incidental reference.

STUDENTS

The chief findings of the California survey with respect to the junior college student are these: (1) the greatest proportionate elimination of students from secondary schools occurs between the high school and the junior college and between the first and second junior college years; (2) until the advent of the junior college the high school was becoming increasingly the place of final training of its students; (3) standards for admission to junior colleges are less stringent than for other higher educational institutions; (4) this fact implies a need for a vigorous program of adaptation of the work offered in the junior colleges; (5) junior college students who graduated from high school without securing college entrance recommendations select diploma courses and drop out of junior college more frequently than

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¹ Given in parentheses following résumé. The number corresponds to the survey number and is followed by the pages cited after a colon.

recommended high-school graduates; (6) there is no substantial foundation for the claim that junior college students who transfer to a university tend to be unusually unsuccessful. (1: 64-83.)

standard of work in junior colleges is low and inadequate." (5: 46.)

TEACHING STAFF

The California survey is the only one of the group which attempts

TABLE I
STATE SCHOOL SURVEYS INCLUDED IN THIS ANALYSIS

State	Director	Date Published	Field Covered	Publisher
1. California	L. V. Koos	1923	Secondary Education	California State Department of Education, Sacramento, California
2. Massachusetts	G. F. Zook	1923	Technical and higher education	Commonwealth of Massachusetts, House Document No. 1700
3. Mississippi	M. V. O'Shea	1926	General	State Department of Education, Jackson, Mississippi
4. New Jersey	H. Updegraff	1928	General	State of New Jersey, Trenton, New Jersey
5. Texas	G. A. Work*	1924	General*	Texas Educational Survey Commission, Austin, Texas
6. Utah	J. J. Tigert	1926	General	Government Printing Office, Washington, D.C., Office of Education, Bulletin 1926, No. 18
7. West Virginia	L. V. Cavins†	1928	General†	State Board of Education, Charleston, West Virginia

* Volume 3, *Secondary Education*, is by C. H. Judd.

† Volume 4, *Institutions of Higher Education*, is by a committee, C. H. Judd, chairman.

The Texas survey presents less comprehensive statistical data on junior college students than the California survey. On one point clearcut disagreement occurs between the two surveys. With respect to the relative success in university work of former junior college students, the California survey, while admitting that the evidence is not entirely consistent, concludes that on the whole the scholarship of junior college transfers compares favorably with that of students who have had their first two years of work in the university. The Texas survey, however, concludes that "in so far as preparation for advance college work is concerned, the

any extensive study of the teaching staff in junior colleges. Its principal findings and recommendations of general interest are: (1) over half of the junior college instructors are men; (2) the undergraduate training of about one-half, and the graduate training of about one-third of the staff was obtained outside the state; (3) about 90 per cent of the junior college instructors are college graduates, and over half have graduate degrees; (4) between one-third and one-half of the instructors were teaching subjects not within the major or minor fields in which they were prepared; (5) need exists for the inauguration of a definite state-wide program for

the preparation of junior college teachers. (1: 95-105.)

The two junior colleges included in the West Virginia survey and the one included in the Utah survey were found lacking in the training of their staffs. In West Virginia 25 per cent of the faculties had no degree of any kind as compared with 10 per cent in California. (7: 46.) The Utah survey, in evaluating the Branch Agricultural College, states that "the training of the instructional staff does not conform to the standards set for junior colleges by the American Council on Education or by the American Association of Junior Colleges." (6: 320.)

CURRICULUM

The Massachusetts survey defines the scope of offerings for the proposed junior colleges in that state as, "the first two years of college work in liberal arts and sciences and such other courses of study of two years or less in length as the needs of the community seem to demand. . . . They may include vocational, technical, commercial, and home-making courses of study." (2: 262.) This twofold division of the junior college curriculum is a feature common to the observations and recommendations of most of the surveys. The New Jersey survey mentions, besides courses preparatory to professional studies in senior college and graduate school, "training which educates to a definite end" including "mechanic and industrial arts, trade and transportation, business administration, domestic science, banking, insurance, and nursing." (4: 128.) Similarly, the Utah survey, in recommending a program for the Branch Agricultural College urged that, while the

institution should prepare students for entry into the junior class of the state university and land-grant college, "the great importance and usefulness of the short completion courses" be emphasized. (6: 321.) The California survey makes a similar recommendation. The survey found a close similarity between the courses and curricula offered in the first two years of the university and those offered in the junior colleges. This fact and other findings of the survey emphasized "the imperative need for extended inquiry into the relatively unexplored field of the proper curriculum for the junior college student who is not likely to continue into the senior college level." (1: 93.) Thus the distinction between the preparatory and culminal functions of the junior college and the necessity of adequate provision for the latter function is a recurring aspect of these surveys.

FINANCE²

The economy to be secured by establishing junior colleges is emphasized in the West Virginia survey. It asserts that "local junior colleges can be established in conjunction with the larger high schools of the state at one-half the cost of the present colleges." It points out that the large high schools "are equipped far beyond the average small college" and that the establishment of junior colleges "would involve comparatively little additional instructional force and almost no additional overhead expense." (7: 224.) Another aspect of

² See also Paul R. Mort, "State Participation in the Support of Junior Colleges," *Teachers College Record* (May, 1929), XXX, 745-751.

the financial relationships of junior colleges is noted in the Utah survey which points out that the burden of tax-support for public higher education is considerably lessened by the work of five private junior colleges. (6: 237.) The Mississippi survey points to the economy which might result if some of the small four-year colleges of that state should restrict their work to their junior college level. (3: 228.)

The surveys recommend varying methods of financing local junior colleges. Most of them favor joint support by the state and the local community. In the Texas survey this recommendation is modified in two ways. First, the participation of the state is not recommended until adequate provision is made for the support of institutions already in existence. Second, it is suggested that the state might, when it is sufficiently developed in wealth and resources, take over the local junior colleges altogether. (5: 80.) The New Jersey survey recommends joint support from state funds and tuition charges. (4: 129.) The Massachusetts survey, on the contrary, recommends that no tuition charges be made (except for non-residents), that the State assume 90 per cent of the expenditures for salaries, and that the local city pay the remaining 10 per cent of the salaries and all other expenses. (2: 261).

ESTABLISHMENT AND LOCATION

What are some of the conditions which should be met prior to the establishment of a junior college in a given locality? Only two of the surveys suggest specific answers to this question. All of the surveys which touch upon this question at

all, however, warn against the indiscriminate establishment of junior colleges merely to satisfy local ambition and without reference to local needs or a co-ordinated state policy. The California survey suggests the necessity for state authority to stand in the way of the establishment of additional junior colleges where the needs in this field can be better met by institutions already existing. (1: 117.) The surveys of Texas (5: 80), Massachusetts (2: 261), and West Virginia (7: 226) make similar recommendations.

Some of the more specific recommendations concerning the establishment of junior colleges are shown in Table II. For purposes of comparison, the legal requirements in force in Arizona, California, Michigan, and Minnesota are included.

Discussions of the location of junior colleges emphasize that by means of intelligent estimates a relatively small number of institutions can be so located as to serve a very large proportion of the total number of students. Thus the Massachusetts survey estimated that a 15-mile radius around twelve properly located junior colleges would include from 85 to 90 per cent of the state's population (2: 263). What happens when no policy for the location of higher institutions prevails is well illustrated by the Texas survey, which found large and rather well-populated areas of that state without colleges of any sort. (5: 73).

GENERAL RECOMMENDATIONS

The attitude of the surveys toward the junior college movement is uniformly favorable. This atti-

tude, however, is far from an uncritical acceptance of every junior college proposal. In particular, the surveys warn against the maintenance of low standards of work.

extension to include professional training should be out of the question." Such a procedure, says the report, "would introduce conflicting elements into the impending organi-

TABLE II
EFFECTIVE AND RECOMMENDED REQUIREMENTS FOR ESTABLISHING
JUNIOR COLLEGES

States	Requirements			Population of School District	Number of Institutions Recommended
	Finances (Minimum Assessed Valuation)	Students in A.D.A.			
Massachusetts survey	\$10,000,000	500	high school	.....	12
New Jersey survey .....	.....	.....	.....	.....	7
Texas survey	10,000,000	400	high school	.....	..
West Virginia survey .....	.....	.....	.....	Larger districts of the state	3
Arizona law	5,000,000	100	high school	.....	..
California law	25,000,000	1000	high school, 200 junior college	.....	..
Michigan law .....	.....	.....	.....	25,000	..
Minnesota law .....	.....	.....	.....	50,000	..

The Texas survey recommends that definite minimum standards of admission, curriculum, and graduation be worked out by a representative committee and administered by the State Department of Education. (5: 80.) In suggesting the establishment of junior colleges the West Virginia survey urges that a high standard be set from the very beginning, since low standards, once accepted, are difficult to raise. (7: 226.) The Massachusetts survey suggests an annual inspection of the proposed junior colleges by the State Department of Education and the calling of a conference to establish accrediting relations between the higher institutions already in existence and the junior colleges proposed. (2: 262.)

The "upward aspirations" of the junior college into a four-year institution receive little encouragement from the surveys. To quote the California survey, "such upward

zation of the educational system." (1: 12.)

SUMMARY

By way of summary, a few of the more general conclusions of the state school surveys are listed.

1. State school surveys have adopted a favorable attitude toward the junior college idea.
2. The junior college is becoming a recognized unit of secondary education.
3. Conflicting evidence as to the relative success of junior college students suggests the need for further carefully controlled investigation of this question.
4. As the number of junior colleges increases, it will be necessary to face the problem of the type of preparation which best fits teachers for work in this field.
5. The need for terminal courses in junior colleges is not yet adequately recognized.

6. The financial support of junior colleges raises several questions on which investigations might profitably be conducted:
 - a) Should public junior colleges charge tuition?
 - b) Should public junior colleges be supported, in whole or in part, from state funds?
 - c) If state funds are used, should they be derived from a fund specially allocated to junior colleges or from the general school fund?
 - d) What are the financial prerequisites for the establishment of junior colleges under varying conditions?
7. The state should have considerable authority in determining the location of junior colleges within its borders.

Heartiest congratulations on the first issue of the *Journal*. It is indeed a most interesting one, both for those in the junior college field and for those concerned with problems of higher educational administration generally.—**ARCHIE M. PALMER**, Association of American Colleges, New York City.

May I congratulate you on the first issue of the *Junior College Journal*. I found the issue extremely interesting from cover to cover.—**JOHN T. WAHLQUIST**, Department of Secondary Education, University of Utah

“Personally, I believe that the junior college movement is an important development in American education.”—**WILLIAM C. BAGLEY**.

JUNIOR COLLEGES WANTED

An Associated Press dispatch from Boise, Idaho, states that applications have been placed before the board of education for establishment of junior colleges at Boise and at Rexburg. The application from Rexburg, backed by a delegation of upper Snake River business men and public officials, was accompanied by the proffer of the \$300,000 plant of the Ricks Junior College at Rexburg, which will soon be dropped from the school system of the Latter-Day Saints Church. The Boise delegation pointed out that one-fourth of the state's population lived in the area which would be served by a junior college in the capital city. It has been a subject before the legislature for years and was brought to a peak when Leonard V. Koos, educational investigator from the University of Chicago, made a favorable report on the proposal last summer.

PHI THETA KAPPA

Alpha Omicron chapter of the junior college scholastic honor society, Phi Theta Kappa, was installed at Tyler Junior College, Tyler, Texas, at a special assembly held December 17. Parents of members of the chapter and the senior class of the high school were guests of the college at the program.

LOS ANGELES GROWING

To provide for increased enrollment the second semester, nine new members were added to the faculty of the Los Angeles Junior College in January. The library is being built up at the rate of one hundred new volumes per week.

Misconceptions Regarding the Junior College

FREDERICK J. WEERSING *

Efforts to formulate state policies for the development and support of public junior colleges are awaiting a better understanding and a more thorough agreement concerning the definite functions of these institutions and their proper relation to existing types of education. In order that the urgent problems which now face those in charge of junior college education may be solved as effectively and expeditiously as possible, it is essential that certain fundamental conceptions concerning the junior college become more generally accepted by state and local administrators, by legislators, and by citizens who are influential in state and local government.

A brief reference to the history of high-school education in the various states is appropriate at this point. The evidence bears out the conclusions reached by Koos,¹ Proctor,² and others, that the most decisive factor influencing the efficiency and adequacy of our state systems of secondary education has been the kind of policy adopted by the various state legislatures and state boards of education in the early, formative period of these in-

stitutions. States which a generation ago adopted a far-sighted policy of careful distribution and wise support of high schools today are reaping the benefits in the form of strong, well-located, and effectively articulated high schools. States which in earlier days lacked proper educational leadership and vision are now having to cope with large numbers of weak and relatively inefficient high schools, able to offer only a restricted program of secondary education, often but poorly adapted to the needs of their pupils. It is a case of a clear-cut vindication of a far-sighted public policy, illustrating the advantages of building according to a plan, instead of in a haphazard, happy-go-lucky way.

JUNIOR COLLEGE SITUATION

Today we are facing a parallel situation with respect to junior colleges. The junior college laws now being passed, the methods of state support and control now being adopted, will bear fruit for decades to come, and the particular kind of institution now established will undoubtedly determine the course of junior college education for a long time in the future. It is imperative, therefore, that at least a general agreement concerning fundamentals be reached.

This does not involve a program of restriction or the enforcement of a narrow set of state requirements. There is good sense in the pleas of many that the junior college for

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¹ Leonard V. Koos, *The American Secondary School*, Ginn & Co., 1927, pp. 212 ff.

² William Martin Proctor, "Union Versus Single-District High Schools," *Educational Administration and Supervision*, (March, 1918), IV, 141-154.

some time to come be given all the freedom it needs to work out its own destiny. While the junior college is no longer in the experimental stage as regards its utility and adaptability to American educational ideals, it is probably true that many, if not most, of the details of curriculum and staff organization, methods and materials of instruction, and articulation with higher and lower units still remain to be worked out. It seems clear, however, that the movement is far enough under way, at least in certain of the states, so that the next most urgent need is a general agreement regarding the place and purpose of the junior college on which may be based a program of state legislation and a plan for wise guidance and control by state boards of education in order that the institution may eventually reach the state of greatest possible usefulness to all the people.

The present paper is a modest attempt to point out a few of the misconceptions that seem to the present writer to threaten the future of the junior college as envisaged by such men as Harper, Lange, Koos, and other pioneer thinkers in this field. The attitude, however, is not that of setting anyone right, but of hastening a little, if possible, the day when clear-cut, general policies of state and local promotion of this institution may be agreed upon, and of reducing as much as possible the period of costly experimentation and groping in the dark.

COLLEGIATE ASPIRATIONS

In this connection it appears that one of the most persistent misconceptions of the junior college is that held by those who entertain aspira-

tions that somehow, through the rapid growth and development of their local junior colleges and by virtue of the patronage and financial support accorded them by the public, these institutions will, in the relatively near future, be able to drop the cognomen "junior" and graduate to full collegiate status. Many junior college administrators, who privately or publicly urge their ambitious programs, appear to suffer from a sort of educational blind spot, so that the real secondary nature of their institutions is not apparent to them. They spend their time in building up a sentiment for the larger program, both in the minds of their students and their constituencies, instead of using it in planning a really democratic program of secondary education for all the people. Such administrators apparently fail to see that the realization of their collegiate aspirations is likely to be the doom of the junior college idea in their respective communities. For, certainly, the characteristic feature of the junior college, as defined by all the leaders of the movement, is a comprehensive, cosmopolitan, humanized type of general education—a sort of university of the common people, serving the needs of all types of students—industrial, commercial, semi-professional, as well as pre-collegiate and pre-professional. If this fundamental notion be accepted, then the question arises: How can such curricula be harmonized with the academic standards and requirements of the American Council on Education, and of other accrediting agencies of collegiate institutions? How long will shop courses, typewriting, shorthand, advertising, applied

courses in music, art, and a score of other fields survive in an accredited collegiate institution bound to insist on the same formal entrance requirements and selective devices resorted to by established colleges and universities? How can a young, financially weak institution undertake to meet the exacting requirements in buildings, equipments, and staff necessary for upper-division, specialized courses in academic and scientific fields without impoverishing the resources available for the practical types of education demanded in the lower division? How are the latter types of education to be brought within the pale of academic respectability in order to receive credit and recognition by higher institutions? Finally, and more particularly, how can the two viewpoints of general, foundational, non-selective, humanized, life-enriching education on the one hand, and of strictly accredited, specialized education of the research type, on the other hand, be reconciled? The two sets of aims and ideals appear to the present writer to be mutually exclusive, and likely to lead to the exclusion of those characteristic forms of education which we have come to associate with the name of junior college.

UNIVERSITY "EQUIVALENTS"

A second misconception in regard to the junior college, which is still very much in evidence almost everywhere and which is closely related to the one just discussed, is that junior college courses should be "equivalent" to similar or closely parallel courses in the university. The term "equivalent" in this connection is taken to mean a course not only of the same caliber of

difficulty and requiring the same prerequisites, but also, and more particularly, a course on the same materials, often the very same textbook, and guaranteeing the same general organization and treatment of subject-matter. In other words, such junior colleges seek to reproduce as nearly as possible the exact situation that students taking these courses would meet were they to take them in the state university.

It is understood, of course, that the "university equivalent" idea is one that is the result, at least to a large extent, of a necessity on the part of junior college administrators to have their institutions accredited or definitely received into affiliation by the higher institutions whose courses are thus duplicated. In the case of certain types of work university inspection, or even state law, or a rule of the state board of education, makes it necessary for a junior college to duplicate the work of the state university in order to be recognized and to receive its share of state funds. In the case of other types of work—and this is more difficult to excuse—courses are organized as traditional university courses merely because instructors or administrators do not know what else to do, or because they really believe that the quality and reputation of their institutions or departments demand that they offer work "of the same grade and quality" as that given in the state university.

Now it seems to the present writer that a really careful study of the aims and ideals of the junior college as defined by past and present leaders of the movement makes it clear that one reason for calling the junior colleges into existence

was to reorganize the first two years of work as given in the universities. Indeed, it may be said without fear of contradiction that one of the most outstanding features of college and university reorganization during recent years consists of the effort to discard, in their lower divisions, the very type of work which these ambitious junior colleges are so assiduously copying. Generalized non-technical courses in science, in social studies, in English literature, and composition constitute precisely the kind of education which the junior college is expected to provide and which it hopes to utilize as the basis of a new type of liberal arts education more distinctive of modern civilization and culture than professionally organized subject-matter can ever hope to be. To realize this fundamental purpose, the junior college, even in its courses for the college preparatory students, must throw off rigidly technical methods and materials, and substitute for them the methods and materials of vitalized and reorganized secondary education, which is above all else a general rather than specialized or technical education.

THE VOCATIONAL SCHOOL IDEA

A third misconception of the junior college, quite in contrast with the two already described, is that the junior college should be primarily a sort of vocational school; that academically minded students should go on to higher institutions; and that the junior college is needed to give training to "the noncommissioned officers of industry." There undoubtedly are situations, such as exist in large metropolitan centers, which demand a specialized junior

college of this type, just as a few specialized commercial and vocational high schools have been outstandingly successful. The point to be made, however, is that the junior college is designed to serve the whole population, and, while differentiated curricula providing for the various industrial types of students are highly essential, this group is no more entitled to the exclusive attention of the junior college than is the college preparatory or the pre-professional group.

It remains to be seen, of course, what our public schools can do in the future by way of training for occupations of a semi-professional nature. Without discounting or belittling in any way the splendid work that has been done in vocational education on the high-school level—as, for example, in agriculture, commerce, shop-work, home-economics, etc.—it must still be admitted that in spite of almost heroic efforts on the part of the federal government over a period of nearly seventy years (since the Morrill Acts), our people have not responded to vocational education in any very enthusiastic way. Our agricultural and mechanic arts "colleges" (admitting eighth-grade graduates at the beginning) have become state colleges of the university type. The Smith-Hughes Act, it is now admitted by many public school administrators, is based on a mistaken conception of vocational education. Even our state teachers' colleges seem to be destined to become institutions of general learning, and the professional study of education is on the way to becoming largely a graduate function.

A generation ago there was a wave of enthusiasm over special

high schools—manual arts, polytechnic, commercial, etc. The names are still with us; the idea is dead, except in such metropolitan situations as referred to above. Snedden, Prosser, Profitt, and others appear to have been right—true vocational education does not prosper in a comprehensive high school. Special vocational schools, on the other hand, have not solved the problem, nor has co-operative part-time education been generally successful.

Dr. Aubrey A. Douglas, dealing with this identical problem in junior colleges, writes as follows:³

In support of the assertion that terminal courses are not coming up to expectations in the junior college, attention is directed to the manner in which students have reacted to them. In California, where the public junior college has had its greatest development, comparatively little interest is shown in the vocational curricula, and a great deal of interest is shown in those of a preparatory nature. More interest is aroused in the general curriculum than in curricula which train for the semi-professions. In no small measure this is because, through the "diploma" (general) curriculum, the student may eventually land in the "certificate" (college preparatory) curriculum, which will give him standing in the four-year colleges and universities. The fundamental trend, however, seems to be away from vocational training toward a type which is academic in nature. This trend is not new; on the contrary, it has been manifest throughout the history of education.

Can it be—despite the demands of an age of mass production, of increasing specialization, of standard,

interchangeable parts both in machinery and in human organization—that democratic society has nevertheless grasped the truth that *training* is not *education*, and that the upward path of the individual as of mankind lies, rather, in the development of personality, of appreciation, of attitudes, in other words, in broad, general education? If so, then a scheme of things that would make the junior college a place primarily for vocational training instead of liberal education seems to be foredoomed to failure. Specialized training there must be—the terminal idea is basically sound; but the spirit of the public junior college is not exemplified in these things only. The educational pearl of great price will be found, rather, in the development of our common people by general education for all.

TWO-SCHOOLS-UNDER-ONE-ROOF IDEA

A final misconception, to be dealt with briefly, is really a combination of the two last mentioned: namely, that the junior college is, on the one hand, a college-preparatory institution and, on the other, a vocational school, and that the two student bodies must be kept in strictly separate classifications so that no terminal student may be enrolled in college-preparatory classes or a college-preparatory student in terminal classes, except in subjects like physical education, which do not count for credit in any case. This misconception has been particularly in evidence in California public junior colleges where students are frequently classified as "recommended" (to college) or "non-recommended," depending on the units of credit received in high school with grades above or below "B."

³ Aubrey A. Douglas, "Curriculum Determinants in the Junior College," *California Quarterly of Secondary Education*, (October, 1928), IV, 37-44.

Those of "B" or above are counted as being of "recommending" grade and those below "B" as being of "non-recommending" grade. As a rule, twelve of the fifteen high-school units required for admission to college must be of recommending grade and must be taken in academic subjects. There is wide variation of practice, however, in different junior colleges, and during recent years a number of junior colleges have experimented with the admission to college - preparatory courses of students with ten, or eight, or even six, recommended units.

The practice of thus classifying students as "recommended" or as "non-recommended," and thereupon admitting them only to "certificate"⁴ or "diploma" courses as the case may be, has resulted in a serious loss of prestige of the diploma courses. This situation has interfered very palpably with the success of so-called terminal education in the junior colleges, especially in California. Informal inquiry reveals, however, that a parallel situation exists in other states, so that the terminal idea either threatens to divide the junior college into two schools under one roof, or else will be lost altogether, leaving the junior college to become as academic and completely dominated by the ideals, aims, and methods of higher education as was the high school prior to 1913, that is, before the conscious development of the comprehensive, cosmopolitan

high school as defined by the Commission on the Reorganization of Secondary Education.

What is needed, apparently, is a complete reorganization of methods of student classification in junior colleges so that a student will no longer be thought of as being either all "recommended" or all "non-recommended," but will be admitted to individual courses on the basis of his past record and present status, measured by objective tests, in the subject concerned. This method would allow the terminal student to receive college credit in the academic subjects which he would be required to take, such as English literature and composition, social studies, science, etc., so that his choice of a vocational curriculum would mean the loss of credits only in the vocational types of subjects not recognized for entrance credit to a higher institution. At the present time, in many junior colleges, the terminal student receives no credit whatever toward advanced standing for the academic courses he has taken, resulting, as was stated, in a very serious loss of prestige in the case of every type of non-college preparatory training.

A further need in this direction is a more liberal attitude on the part of university professional schools toward giving credit for certain non-academic types of courses; provided, always, that these courses are applied toward appropriate professional degrees in the university. It seems difficult to understand why so many university schools of commerce or business administration, for example, have set up entrance requirements identical with those of the college of science, letters, and arts, or of the medical school, or any

⁴ Certificate courses are those yielding credit toward a certificate of junior standing in the University of California. Diploma courses are all those not yielding such credit but nevertheless applicable toward graduation from junior college.

other division of the university. It seems reasonable to suppose that entrance requirements to upper-division work should be differentiated so that a prospective secretarial worker or a prospective teacher of commercial subjects in the high school would be allowed to take shorthand, typewriting, and other applied subjects in the junior college, and receive credit for them toward an appropriate degree in the university school of commerce. The same principle would seem to apply to the other professional schools.

In the meantime, it appears to be questionable policy for a junior college to offer, first, a set of accredited liberal arts courses of the traditional, highly specialized type, open only to college preparatory students, and then to kill off its offering of terminal curricula by refusing to give any college credit in them at all, so that students generally do not enroll in them. Properly humanized courses in the general subjects would be more valuable for both the college preparatory and the terminal student, while proper safeguards for selective admission could still be preserved in the specialized subjects required, such as foreign languages, advanced mathematics, advanced science, or whatever other courses are required for the particular pre-collegiate or pre-professional certificate a student may desire.

Such a system would probably tend to lessen the stigma now attached to terminal curricula, would avoid any unpleasant distinctions between the two types of student bodies, would preserve the modern idea of generalized, humanized, secondary education, and would make the junior college an institution of

liberal culture to all who enter its doors.

RESULT OF YOUTH

The misconceptions referred to in the preceding portions of this paper are all, or nearly all, consequences of the youth of the institution discussed. When the junior college becomes better established the issues discussed will undoubtedly become clearer. Whatever the final solution may be, there can be little doubt concerning the fundamental and far-reaching significance of the issues presented. The junior college was called into being because established institutions no longer adequately met existing needs. It is not merely a different organization or combination of old things. It is a new institution, with new educational aims, ideals, and objectives. It is still too young, too exuberant, to full of energy, for anyone to foresee completely its unbounded opportunities, or to confine it thus early to any set of prescribed limitations. This newcomer into the educational family, as in the case of human infants, almost immediately assumed a position of dominance. From kindergarten to college, our school units are being reorganized; new schemes for school districting with special reference to the junior college are being prepared; state systems of school finance and apportionment of funds are being revised; new sources of school revenue are being demanded; and new theories of state and local responsibility for educational control and support are being urged. None of these things, however, can be done intelligently unless some agreement can be reached regarding the fundamental issues presented.

The Origin of the Six-Four-Four Plan

ROBERT LOCKE COOKE*

In the bulletin entitled *The Junior College in California*, issued in 1928 by the California State Department of Education,¹ is found an interesting statement regarding the 6-4-4 plan of school organization. The bulletin was written by former State Superintendent William John Cooper, now United States Commissioner of Education. To quote the two paragraphs there given:

One California city, Pasadena, is at present experimenting with another plan for the organization of the junior college by combining the eleventh and twelfth grades of the high school with the junior college in the upper unit of what is generally known as the 6-4-4 plan. This type of organization was advocated by Mr. George A. Merrill, Director of the Wilmerding School of Industrial Arts, The Lux School of Industrial Training, and the California School of Mechanical Arts in San Francisco, as early as 1909 before the California Teachers' Association, and was specifically set forth by him before the California High School Teachers' Association in 1914, in these words:

"Following the intermediate school that I would advocate, should come, in my opinion, a high school or perhaps what would better be called a college, and the province of that school should be made to include the eleventh, twelfth, thirteenth, and fourteenth grades. In other words, I would take

* Instructor, John Swett Union High School, Crockett, California.

¹ *Bulletin G-3*, p. 16.

² *Proceedings of the National Education Association*, Los Angeles, 1907, pp. 1048-54.

the first two years out of the university and the last two years out of our present high schools, and I would group them together into an independent institution which would be called either a high school or a college. That school I would have highly differentiated. In this I would have some vocational schools, some cultural schools, some pre-professional schools, and technical high schools."

It will be interesting to look further into the matter to seek amplification of Dr. Cooper's statement.

At the 1907 meeting of the National Education Association held in Los Angeles, Mr. Merrill in an address on "Trade Schools and Trade Unions" said:²

They (trade schools) must be well articulated with the grammar school—although there follows from this as a corollary the most serious consideration of all. Under our present scheme of eight elementary grades a child beginning at the age of six should finish at fourteen and usually does finish at about fifteen. Entering a trade school at fifteen he should graduate at nineteen, and many would be only seventeen or eighteen, which is far too young for their acceptance as journeymen.

He apparently did not consider that occasion the proper place to present his idea as to a possible solution of this "most serious consideration" but he did so in most exact detail the following year.

PUBLISHED IN 1908

In the *Biennial Report of the President of the University of Cali-*

fornia for 1906-1908 there is printed on pages 69-72 the following recommendation from Mr. Merrill to President Benjamin Ide Wheeler, who was ex-officio chairman of the Wilmerding School Committee of the Board of Regents of the University, under date of July 1, 1908:

The different grades in the American school system are commonly grouped as follows: grades one to eight inclusive constitute the elementary school (formerly called the primary and grammar grades); grades nine to twelve inclusive constitute the high or secondary school; an ordinary college course, such as that of the University of California, covers the thirteenth to sixteenth school years. If our experience at the Wilmerding School counts for anything, a successful solution of the trade school problem cannot be had without a re-grouping of the grades. At present we do not get our boys at the right age for the best results. It is a matter of common observation among educators that hosts of boys drop out of the grammar school at the end of the sixth grade, and again there is a grand exodus during the second year of the high school (about the end of the tenth grade). Back of this phenomenon there are controlling influences that should be met and taken advantage of. Our experience indicates that so far as industrial training is concerned these places where boys tend to drop out of school in large numbers are natural turning-points, and as such should govern the grouping of the grades in the elementary, intermediate, and higher schools. The elementary school should end with the sixth grade. Grades seven to ten (the last two of the present grammar grades and the first two of the present high school) should be made to constitute a new intermediate or secondary school. As it stands today, boys finishing the grammar school at the age of fifteen

(which is about the average) are too young by two years to begin apprenticeships. The future American trade school must find a way to get its boys at the same age at which boys ordinarily begin apprenticeships outside of school, not because of custom, but because that is the time when boys are mentally and physically ready to begin their trades.

Here then we have advocated a new intermediate or secondary school, i.e., a junior high school of four years. But as the initial quotation of this article would indicate, he did not stop there. The report goes on to state:

The last two grades of the present high school should be grouped with the two lowest grades (the freshman and sophomore years) of the present college course, to form a new high school or college. The actual teaching of trades, if that ever becomes a recognized function of the public schools, must fall within the province of this new high school, in which the pupils would range from sixteen or seventeen years of age to twenty or twenty-one. The intermediate school that I have suggested (grades seven to ten; ages twelve or thirteen to sixteen or seventeen) cannot be relied upon to give anything more than a preliminary industrial training of a very general sort, valuable, indeed, but not specifically vocational. Differentiation would most likely begin with the higher school or college, of which there would be several kinds—some trade schools, some classical schools, some pre-medical, some technical high schools leading to engineering, some commercial, etc.

REPRESENTATION IN GRAPHIC FORM

At the request of President Wheeler, Mr. Merrill made his administrative scheme more specific by submitting it at that time in graphic form. A facsimile of the

original chart, which was not included in the report as published by the University, is here printed for the first time, with the addition only of vertical lines for added clearness.

The chart is self explanatory, and might more properly be called a presentation of the 6-4-4-4 plan:

porting formally in 1910, Director Merrill restated and amplified his propositions.³ Then, in the 1914 address referred to at the beginning of this article, he emphasized their value not only in solving trade-school problems but as a general administrative scheme for the whole school system.

SCHEME FOR TRANSITION FROM PRESENT GROUPING OF GRADES TO PROPOSED NEW GROUPING

NATIONAL PRESENTATION IN 1914

Soon after this, the plan was presented before a much wider audience, when as a member of the National Education Association's Committee on the Place of Industries, appointed in 1907 and re-

In this speech as well as in later writings, he urged most strongly the advantages of the 6-4-4 as against the 6-3-3-2 plan then so rapidly growing in favor. In this

³ *Proceedings of the National Education Association*, Boston, 1910, pp. 756-57.

connection it is interesting to note in a recent article this statement:⁴

Only a few years ago, the taxpayers were presented by the educational leaders of America with a new discovery in education—the junior high school. The taxpayers were told that instead of the obsolete 8-4, we should have a 6-3-3 set-up. They accordingly invested and are still investing millions of dollars in the junior high school; and we believe that these millions have been wisely invested. But now many of these educational leaders are saying: "We were a bit premature; we should have said 6-4-4."

A more detailed treatment of this whole matter is on file in the University of California library in an unpublished Master's thesis by the writer entitled "Some Contributions of the Lick and Wilmerding Schools of San Francisco to the Administration of Vocational and Secondary Education."

The first copy of the *Junior College Journal* came to my hand a day or so ago. When I extend my congratulations upon this publication, I am conveying my sincere thought after having read the entire contents of the *Journal*. I am sure that there is need for this journal and I ask that you accept the encouragement of this department. I am directing that our subscription for the *Journal* be at once entered.—VIERLING KERSEY, Superintendent of Public Instruction, State of California

⁴J. B. Lillard, "The Six-Three-Three-Two Versus the Six-Four-Four Plan of Organization for the Public Junior College," *School and Society*, (August 23, 1930), XXXII, 262-64.

JUNIOR COLLEGE NEEDS IN UTAH

The need for junior colleges becomes more and more urgent from year to year. . . . The urge of youth to secure college training is now approved and encouraged by parents, perhaps to a greater extent than ever before. Those who feel themselves financially unable to send their sons and daughters away from home for college work are anxious that junior college training be made available near home at less expense. I would recommend that the legislature make provision for the establishment and maintenance of state junior colleges at such centers as it may deem advisable. No better investment can be made by a state than the best possible educational training for its future citizens.—C. N. JENSEN, *State Superintendent of Public Instruction of Utah*, in his annual report for 1928, p. 23.

I wish to offer my very hearty congratulations on the first issue of the *Junior College Journal*. It seems so full of spicy articles and new things in the junior college field that it would appear to be of interest to a large group of educators in the country. I certainly hope for all success in the development of the project.—GEORGE F. ZOOK, president, University of Akron

"I feel quite certain that the junior college movement is here to stay."—CHARLES H. JUDD.

Proposed Junior College Law for Washington

E. M. BLEVINS *

The bill proposed for the purpose of legalizing existing junior colleges and setting up the necessary legal status for creation, organization, and support of new ones in the state of Washington was known as House Bill No. 195. It was read in the House for the first time February 5, 1929. The plan of this article is to give a brief history of the bill and to state its contents and then to call attention to some of the omissions and the conditions which prevented it from becoming a law.

House Bill No. 195 was the second attempt made by a small group of Washington schoolmen to secure legal recognition for the work they had already done in establishing public junior college work in their communities. There were only three public schools in the state making any real attempt to do junior college work at the time the bill was up for consideration. These were Mount Vernon, Centralia, and Yakima. These junior colleges were extra-legal so it was necessary to finance them almost entirely by tuition. They had been particularly fortunate in the matter of buildings because the communities had more high - school building accommodations than were necessary for school purposes. One school had the use of a grade building, which could be remodeled quite easily to adapt it to junior college use.

Each of these districts could have

* Superintendent of schools, North Bend, Washington.

financed the junior college work locally without exceeding the statutory limit of twenty mills had it been a legal expenditure of public school funds. When the bill finally came before the legislature a number of communities, ambitious to establish junior colleges, were easily enlisted in its support. A good bit of educational work had been done. A wide interest in the junior college movement had been awakened. The chief points stressed by the proponents of the bill were: educational opportunities offered those who were unable to attend the University or the State College; the economy of educating these young people at home; the early age of college freshmen; and the success of junior college students who entered the University. So well was this work done that the bill passed both houses of the legislature by substantial majorities, only to be vetoed by the governor.

THE BILL SUMMARIZED

The bill contained twenty-four complete sections covering seven full pages of *House Journal* form. Section one defined the junior college and declared that it should be an integral part of the public school system of the state of Washington. Section two provided for the manner of petitioning for the right to vote on the formation of a junior college. It provided for a Board of Review, consisting of one representative from the state office, one mem-

ber from the County Board of Education, and three qualified electors in the proposed junior college district, to act as the administrative body for the formation of the junior college district. Section four gave, in part, the duties of the Board of Review. Section five provided for the place and manner of voting, and sections six, seven, and eight dealt with the election of junior college boards. Sections nine and ten dealt with the organization and duties of the junior college board, and sections eleven and twelve with the election of directors and their organization when elections come at a time other than the regular school election. Section thirteen dealt with changes in boundary and section fourteen with powers of junior college boards. Section fifteen gave the relation of the State Superintendent to the junior college. Section sixteen covered courses offered and requirements for graduation and section seventeen, the privileges of the junior college teacher under the retirement law. Section eighteen required the keeping of records and nineteen set a tuition fee of \$25 per quarter for students from the state and a minimum of \$50 a quarter for students from outside the state. Section twenty made it mandatory for the county commissioners to provide for the necessary expense of the junior college up to the limit of two mills on the assessed valuation of the district on the recommendation of the junior college board and up to a limit of four mills on the vote of the people of the district. Section twenty-one provided for financing junior college districts which include constituent territory situated in two or more counties. Section twenty-two treats the prob-

lem of junior college bonds and twenty-three draws the "hoodoo" number in attempting to legalize the existing junior colleges. Section twenty-four provides that the unconstitutionality or validity of any section shall not affect the validity of the act as a whole.

THE BILL CRITICIZED

In the first section of the bill, which defined the junior college and declared it an integral part of the public school system, one is impressed with the fact that no attempt was made to integrate the junior college into the general public school system. The bill gave the impression of being a measure to provide more high school for districts fortunate enough to possess one. This condition can be cleared up by carefully defining four or, perhaps, five types of junior college organizations which would provide for the needs of all sections of the state. Proceeding on this basis each type could be so integrated into the school system of the state that it would have the support of a much larger percentage of the people concerned than it now has. Inasmuch as the soliciting of petitions is a good way to educate people regarding the nature of a proposition and the many other advantages resulting from this kind of campaigning, it would seem advisable to have a higher minimum placed on the number of signers to the petition for forming a junior college district before going to the expense of an election.

As the bill was passed, there was no recognized authority having jurisdiction over the junior college. The State Superintendent was to sanction the formation of the dis-

trict, the governor to appoint the majority of the Board of Review, which had full power to enlarge or reduce the boundary, the State Superintendent to recommend the course of study, and the County Superintendent to approve the budget and send it to the County Commissioners.

It may be reasonable to assume that in all other matters the established state and county authorities should have jurisdiction, but it was not provided in the bill, unless it was implied from the clause in the first section which stated that the junior college should be an integral part of the public school system. If the junior college, union junior college, joint union junior college, county junior college, and joint county junior college districts had been defined and provision made for the organization, finance, and administration of each, the bill would have had much more to recommend it.

Section four is open to criticism because it provided that the Board of Review should provide for an election to determine whether or not a junior college should be established in the territory approved by the Board of Review and at the same time, for the election of a board of five directors for such junior college district. This would insure the election of a junior college board but not a junior college district organization, a position to which few able directors would aspire.

Section eight provided that "in case a majority of the voters favor the establishment of a junior college district the same shall thereupon be established." However, the responsibility for establishing

the district was placed on neither the County Superintendent nor the County Board of Commissioners. In case of a joint county or joint union junior college district, the authority was placed neither with the County Superintendent nor with the State Superintendent.

Section nine, which dealt with the organization of the junior college board, would need to be rewritten in the light of the boards for different types of junior college districts. This would be necessary also in the case of section eleven, which dealt with the election in districts of the first and second class. Section thirteen, which dealt with the change of boundaries, provided that the boundaries of a junior college district might be extended to include contiguous school districts, without regard to county boundary lines, including union high school districts, consolidated districts, joint districts, or *any parts of such districts* which were contiguous to the boundaries of the junior college districts. A provision for dividing a district and taxing a portion of it and exempting the other portion, promises legal and financial difficulties which seem to be impracticable in the light of past experience in consolidation and complications which grow out of indebtedness of component districts. It would seem that if we are to retain the district system, as the legal unit of organization, we should at least respect the element of equality within it. Such a plan multiplies district inequalities rather than reducing them.

Section nineteen, which provided that all students residing in the district should pay a tuition of \$25 per quarter and students living outside

the state an additional amount of not less than \$25, was a bit of political bait which establishes a bad precedent and has little relation to the financial needs of the school. It certainly is not consistent with the public school system of the state, either in its secondary or higher educational institutions. Section twenty provided that the directors might levy up to two mills and that the people might vote up to four mills on the assessed valuation for junior colleges. Perhaps a better plan would have been to have raised the limit of assessments permitted by the board and by local vote and to have designated the percentage to be used for each type of education in the junior college district. A similar plan could have been used for union junior college districts and joint union junior college districts. Since Washington has no law providing for county and joint county high schools, a separate plan of finance could have been worked out for each of these. It would have focused attention on the inequalities of the present district system and made a stronger case for a larger unit of support.

Section twenty-two, dealing with the question of bonds, is hopelessly inadequate. It has this one feature about it, however: it definitely recognized the existing school administration code and in this particular made the junior college an integral part of the public school system. While section twenty-two, providing for extension of junior college territory, is not above criticism, it is certain that provision should be made for the lapse of junior colleges and for the disposition of property owned by the junior college, as well as the withdrawal or

transfer of territory from one junior college district to another.

WHY THE BILL WAS VETOED

In view of all that has been said regarding the faults of the bill, it is only fair to the junior college movement to say that it was not the merits of the bill which caused the two houses of the Washington legislature to pass it, nor its defects which caused the governor to veto it. It was rather a combination of forces working in absolute indifference to the educational interests of the state. It is hard enough for a thoroughly sound and necessary measure to survive such a political barn-storming, but a questionable measure has little or no chance at all. The writer feels confident that it is the opinion of a very large percentage of the proponents of the bill that the cause of the junior college in Washington is in a more favorable position today than it would have been had the bill become a law.

FUTURE IN WASHINGTON

While the following comments are not properly a criticism of the bill itself, they may throw additional light on the probable future of the junior college in Washington. It is a generally accepted principle of educational administration that the first duty of a state is the proper provision for its elementary schools. Due to the district system in Washington, this responsibility has not been met. At the same time that educators were asking for a junior college law, with no aid from the state, supported by tuition and local tax, they were also asking the legislature for a revolving fund to make a minimum elementary school pos-

sible in the poorer sections and for relief for the larger centers for the costs of educating non-resident high-school students. Thus it was easy to conclude that the state was unable to care for what schools it had, without adding any new types.

A second important factor was found in the fact that the State Department of Education had an "Omnibus Bill" before the legislature which provided for a radical reorganization of both the financial and the administrative sides of the whole elementary and secondary school system. A large number of educators felt that this bill should take precedence over all other school legislation. There were many other elements entering into the problem, but they were local in nature and would not operate in the same way in another situation. All in all, it is the opinion of the writer that a so-called public junior college system, without substantial state support, as provided in House Bill No. 195, is not a public junior college system at all and that the legal recognition of such a system only tends to postpone the time when the state of Washington shall have a system of strong state-supported public junior colleges.

A national magazine devoted to this new field, which is already so important and is destined to become much more extended in the near future than now, should render a large service, and I am sure that it will be done by your journal in a large way. "Our prayers and hopes are all with thee." — ARTHUR L. MARSH, editor, *Washington Education Journal*

UNIVERSITY COMMITTEE APPOINTED

In fulfillment of the promise which he made in an address before the American Association of Junior Colleges at Berkeley in November, President Robert Gordon Sproul of the University of California recently appointed a committee of five faculty men to consider problems in relation to the junior colleges and the university, and to promote a more cordial and co-operative attitude in these relations for the future. The members of the new committee are: R. E. Davis, professor of civil engineering, chairman; Dr. W. W. Kemp, dean of the school of education; Dr. D. C. Baker, assistant professor of history and university examiner; Dr. Earle R. Hedrick, professor of mathematics at the University of California at Los Angeles; and Dr. Clarence Hall Robison, associate professor of education and university examiner at the University of California at Los Angeles.

JOURNAL CONTENTS LISTED IN EDUCATION INDEX

According to an announcement in the December 1930 issue of the *Education Index*, all articles and other important contents of the *Junior College Journal*, beginning with the first issue, will be indexed in that well-known reference work of the H. W. Wilson Company. This action was taken at the request of a majority of the librarians of the country, to whom a list of possible magazines for indexing was submitted.

Zoölogy Methods in the Junior College

L. G. INGLES*

Zoölogy in the junior college should be arranged to meet the needs of two groups of students; those who will never take any more science, and those who intend to continue studying along medical, agricultural, or purely life science lines. The first group is usually represented by the greater number of students, and it is for this group that the course at this junior college was primarily, but not exclusively, designed. Such a course must be an end in itself, and yet offer adequate foundation for further studies in the sciences. It must include such material from the whole field of biology, regardless of how or where such material is offered in four-year institutions, which in many cases, have the beginning zoölogy courses arranged primarily around foundational material for more advanced work. The junior college zoölogy, then, must be more humanistic, but not to the exclusion of details or difficulties. The writer believes that most students appreciate interesting courses if they are not too elementary.

In this junior college the instruction centers around certain "topics" and "projects." More attention may thereby be given to the individual needs of the student. The course offers five units of credit each semester, which means that the student spends about nine hours every week in laboratory, lecture, and in-

dividual conference with instructor. There are two laboratory periods, each three hours long, and two lecture-discussion periods of one hour each. The individual conferences average from one-half to one hour each week, but occur only every other week. Each student is provided with two textbooks, and a shelf of reference books in the laboratory provides additional readings on suggested topics.

The laboratory work is always definitely related to the topic under consideration in lectures, discussions, or readings, and it is chiefly of an observational nature. The students make neat accurate drawings of the various structures or animals, and in the case of the latter, a classification, complete as possible, is printed on the plate. Each laboratory exercise has a number of questions concerning the objects that are being studied. These questions may be answered largely by close study of the subject, and they serve as a basis for considerable discussion among the students. The answers to such questions usually represent the conclusions of the class, and each individual must be able to defend these answers in his conference with the instructor. A premium is placed on neatness, accuracy, and good expression in both drawings and answers to questions. Practically every topic has at least one exercise with living material, which is too often lacking in beginning zoölogy.

* Instructor in Zoölogy, Bakersfield (California) Junior College.

The lectures cover the more important points of the suggested readings, and also supplement them with the human-interest relations of the topic. The relationship of structures, groups, and functions are pointed out and discussed. Part of the lecture time is often given to class discussion, which may have as its basis some of the more difficult text readings or the laboratory work. Models, charts, blackboard drawings, lantern slides, and prepared demonstrations are used extensively during the lecture and discussion periods.

One week after the last lecture or discussion period on any particular topic, all of the laboratory work must be completed, and the student makes application for an individual conference with the instructor. During the conference, the student has access to all of his laboratory work and any books that he chooses to bring with him. The conference may be more or less of the nature of an oral quiz, or more frequently of the nature of a discussion. In either case the instructor sees that the more important points of the topic have been mastered by the student, and elucidates points not thoroughly understood. In concluding such a conference, those students who have thoroughly mastered the subject-matter are presented with a typewritten list of "thought questions," and are asked to answer or discuss some of them. These questions test the student's ability to reason with facts and principles already learned. The student is not told whether he has answered these latter questions satisfactorily, but they are discussed by the class and instructor after everyone has finished his conference. The

laboratory drawings and answers to laboratory questions are examined during the conference in the presence of the student. This conference usually lasts about an hour. The student's grade depends upon his mastery of the subject-matter, discussion of the "thought questions," and his laboratory work. The grades received on these conferences determine the greater part of the student's semester grade, the rest being determined by the final examination.

Students whose general work is satisfactory may select some "project" for more thorough study. Such work is not compulsory, but is entirely optional, and is usually selected by students who intend to continue their studies in the life sciences. These projects may require a certain amount of field or laboratory work, or may be based entirely on library research work. The projects which were selected by the students last year were excellently done. One pre-medical student made a series of plaster brain casts of several mammals. The parts of the brain were neatly painted in different colors, and the completed casts were mounted on a varnished wooden base. A paper was written which discussed the differences that occurred among the casts. Another student made wire models of the circulatory systems of animals that had been dissected in laboratory. This was also accompanied by a paper which discussed the homologies of the various systems as well as the method pursued by the student. A pre-dental student collected and mounted a number of mammal skulls representing many different kinds of dentition. Other projects, equally as well done,

have been selected by students whose interests were along other lines. These projects represent work done outside of class under the supervision of the instructor. The papers and projects become the property of the school museum at the end of the school year. The student receives no actual grade for project-work, but his semester grade is influenced by the satisfactory completion of a good piece of work.

After completing the study of the invertebrates, the class spends one week-end at the ocean near Cayucas, where they collect and study marine animals in their natural habitats. Living material is important in any beginning zoölogy course. It not infrequently happens that students are unable to recognize living forms which were studied as preserved material. Near the end of the year a trip is made to the Los Angeles museum where the curators give interesting popular lectures on the various lines of interest. Although rather long, both trips are felt to be quite worth while by students and instructor.

The course, as described above, was not designed to stimulate intellectual laggards, but to make zoölogy a living subject with a definite relation to the student's philosophy of life as well as to furnish him with foundational information and skill requisite for further scientific study. There is no reason to assume that these methods are more advantageous to the student who will continue his work in science than are those of the four-year institutions, but so far, the students have had no trouble in maintaining an average or above average after transferring. The "topic" and "project" idea is more suitable to junior

college students than the usual type of zoölogy courses offered in four-year institutions, because of the greater amount of individual instruction, and the humanizing of subject-matter with some consideration for individual interests. The conference method has so many obvious advantages over the ordinary quiz and examination that it is unnecessary to mention them. There is no claim of perfection for completeness in these methods, but it is believed that where the teaching load is not too heavy, the method is teachable, and that it has many advantages which are especially suitable for small junior colleges.

"The junior college movement is here to stay. With the rapidly increasing numbers of students who desire training beyond the high school, the junior college is almost a necessity. It has taken us a long time to discover that different types of institutions must be provided to meet the varying needs of students. The vital thing is not the growth of this or that college, but the actual opportunities offered to American boys and girls."

—M. L. BURTON
Late President of the University of Michigan

I am glad to hear that you are going to put out such a publication. I am sure it will be very helpful. Perhaps it will save us junior college people from filling out so many questionnaires.—D. K. HAMMOND, Santa Ana Junior College, California

“Ancient History”

PRESIDENT TAPPAN'S OPINIONS

Henry P. Tappan, president of the University of Michigan from 1852 to 1863, has been credited with being the first American educator to suggest the desirability of transferring the work done in the lower college years to the secondary schools.

He graduated from Union College in 1825 during the presidency of Dr. Eliphalet Nott, easily the most prominent college president of his period. It is said that Mr. Tappan was one of the three students whom Dr. Nott regarded with peculiar affection and pride, President Francis Wayland and Bishop Potter of Pennsylvania being the other two; “three men so marked in character, and inheriting so many traits in common from their intellectual parent, that we might liken them to Nestor with his triple brood of heroic sons,” says President Tappan’s biographer. It was through Dr. Nott’s influence that he was selected as president of the youthful University of Michigan.

Dr. Tappan early began to form what were then considered advanced views on the subject of education, especially higher education in the United States, and these views wider reading and reflection tended both to expand and to strengthen. They took on final form during an extended visit to Europe and were published in 1851 in a book entitled *University Education*, which was an exposition of the German system.

Hinsdale, in his history of the University of Michigan, says:

Previous to Dr. Tappan’s arrival on the scene, the Department of Literature, Science, and the Arts had been simply a college of the traditional pattern. His university ideal involved the transference of the teaching done in this college to secondary or gymnasial schools, scattered throughout the state. But this could not be done at once; to attempt it would be to destroy the institution; so, for the time at least, it was an undeniable necessity, not only to retain this department, but also to expand and strengthen it. He said in his inaugural address: “We are a University Faculty giving instruction in a College or Gymnasium.”¹

“ANOTHER EDUCATIONAL JOURNAL”

In the November number of the *Bulletin of the American Association of University Professors*, the leading editorial from the first number of the *Junior College Journal*, “Why Another Educational Journal?” is reprinted in connection with a notice of the origin of the new periodical.

PHI THETA KAPPA CHAPTER

Alpha Iota Chapter of Phi Theta Kappa was installed at the Junior College of Connecticut, Bridgeport, Connecticut, at an assembly held on December 12.

¹ Burke A. Hinsdale, *History of the University of Michigan* (Ann Arbor, Michigan, 1906), pp. 43-44.

The Junior College World

NEW MEXICO MILITARY INSTITUTE

New Mexico Military Institute, a state preparatory school and junior college, was established by an act of the legislative assembly of the territory of New Mexico in 1893. Opened for students in 1898, it existed for some years as a preparatory school with an increasing number of postgraduate students, evolving naturally, in the course of two decades, into its present high-school and junior college organization. After ten years of sharing with the high-school department the facilities of a single recitation building, the erection of Willson Hall permitted complete physical, as well as theoretical, independence of the junior college in its academic facilities.

The courses offered are chiefly isthmian, academic and scientific, 72 per cent of the students continuing their studies in some more advanced institution. A terminal course is offered in Accounting and Business Administration. The War Department awards to recommended graduates commissions in the Organized Reserve Corps of the United States Army.

In an endeavor to discover the value of military education, the Institute recently co-operated with Merrill J. Smith (now a member of the faculty of the Los Angeles Junior College) in a study of its graduates. A surprisingly close parallel was discovered between success in military work at the Institute and success in college, as well as success

in the business and professional world.

GULF PARK'S WELCOME

The *Tammy Howl* of Gulf Park College, Mississippi, tells how Dr. Richard Cox, new president of the American Association of Junior Colleges, was greeted upon his return from Berkeley:

Only a very unusual occasion is important enough to cause the dismissal of a morning class, but when Dr. Cox returned from his election to the presidency of the American Association of Junior Colleges, the entire school forgot fourth-period classes and went to the station to greet him.

As soon as Dr. Cox stepped from the train he was greeted by friends from the chamber of commerce, the Rotary Club, and of course Gulf Park. The girls nearly caused a mob scene as they endeavored to congratulate or even to catch a glimpse of him. They burst into songs that had been composed especially for the occasion.

A special chapel was held, and as Dr. Cox stepped on to the stage, the Gulf Park orchestra, making its first public appearance, struck up. Miss Evans greeted Dr. Cox in a salutation befitting the occasion. Then Dr. Cox told how it felt to be elected to such a position and what the responsibilities were.

NEW PROFESSOR APPOINTED

Fulfilling his promise to call to the faculty of the University of California a leader in the junior college field to represent that phase of education in the curricula of the university, President R. G. Sproul in January announced the appoint-

ment of Dr. Merton E. Hill, principal of the Chaffey Junior College, Ontario, California, as professor of education. Dr. Hill's appointment is effective July 1.

Dr. Hill has been prominent in the junior college field since its inception. William John Cooper, United States Commissioner of Education and formerly superintendent of public instruction in California, speaks of him as "one of the outstanding school men in California. He has not only developed a splendid high school but initiated and perfected what is probably our best and most representative junior college in this state."

The committee of the university faculty, named to advise the president on the appointment, expressed its opinion thus: "He is a man of outstanding ability in the field of secondary education; a man of intellectual capacity and common sense, with a sound professional outlook and possessing a pleasing personality and forceful character, and with a marked capacity for administration."

A.A.U.W. CONVENTION

At the biennial convention of the American Association of University Women to be held in Boston, April 8-11, it is the plan to devote one session to the discussion of "Current Changes and Experiments in the Junior College." Dr. J. J. Oppenheimer, Dean of the College of Liberal Arts of the University of Louisville, will present a paper on this topic as a basis for leading discussion. Dr. Leonard V. Koos of the University of Chicago will be in charge of the summarizing conference. Among the leaders in the junior college field who have been

asked to participate are: Constance Warren, president of Sarah Lawrence Junior College; Katharine M. Denworth, president of Bradford Academy; Margaret Chase, Secretary, Northern California Junior College Association; Mabel Raines, Secretary, Junior College Section of Iowa State Teachers Association; Jeremiah B. Lillard, president of Sacramento Junior College; and A. Ross Hill, former president of the University of Missouri.

COMMUNITY ACTIVITIES AT MODESTO

During the current college year an interesting and considerable contribution to community activities has been carried on by the Modesto (California) Junior College. In order to give all the residents in the vicinity of the college an opportunity to enjoy some of the advantages which the institution is able to bring to the area, several different types of events have been arranged for the public.

One of these was a series of lectures on topics of present-day interest, given under the combined auspices of the American Association of University Women and the college. Each lecture was given by a different instructor selected from the college faculty, and the topics covered a wide range of interests, including recent plant discoveries, modern psychological interpretations, the Carlsbad Caverns, interesting astronomical facts, the flow of money and national crises, national characteristics in music, contemporary poetry, the new humanism, and political forecasts. Other series have included Travel French, in charge of the French instructor; governmental situations today, given by the instructor in history;

courses in voice work, world drama, and contemporary verse, by members of the English Department; while another group of some fifty bankers, members of the Stanislaus chapter of the American Institute of Banking, are carrying on their study for the fifth continuous year under the leadership of Dr. William D. Fuller of the Philosophy Department. Although several of this group drive over twenty miles to attend the weekly meeting of their class, a number of them have a record of 100 per cent attendance! A junior class of this same organization, numbering over twenty, is now in its second year under the same instructor.

Another type of a rather more popular nature has been a series of musical events. Through the co-operation and with the financial help of various service clubs, the college has brought some very fine musical events to Modesto. Two capacity - house concerts by the Royal Russian Choir have been followed at intervals by the "Hallelujah Chorus"; August Werner, baritone; the Brahms Quartette; and Bernard Ocko, violinist. To the general public the cost of these entertainments has been low, while to the college students it is merely nominal.

During the Christmas season the gift of the college to the community was a pageant of Yuletide songs and carols, accompanying the presentation of three of the Chester mystery plays.

The general interest which has been manifested in all these events, the goodly attendance, and the gratifying expressions of appreciation are hopeful signs which are causing the college to realize anew its posi-

tion as a center of culture, from which good things may radiate not only to its students but to its entire community.

SAN BENITO DEAN DIES

On January 15 occurred the death of Philip Power, 52, founder and dean of the San Benito County Junior College at Hollister, California. He was born at Terre Haute, Indiana, in 1878 and had taken graduate work at the University of Chicago, University of California, and Stanford University. Mr. Power organized the junior college at Hollister in 1919.

JUNIOR COLLEGE DEBATES

During the last week in February a series of debates was held between the team of Santa Rosa Junior College, of California, and those of three Utah institutions, Westminster Junior College, of Salt Lake City, Snow Junior College, of Ephraim, and the Utah Agricultural College, of Logan. The question was the desirability of the recognition of the Soviet government of Russia by the United States.

WASHINGTON RECOMMENDATIONS

The report of the meeting of the tenth representative assembly of the Washington Educational Association, held in Seattle, December 5-6, contains the following paragraph on the junior college:

Possible division of judgment on the timeliness of junior college legislation was obviated by the clear-sighted recommendation of the committee on the junior college, which did not recommend immediate legislation but did recommend (1) appointment of a committee of five members—two from higher institutions, two from second-

ary institutions, and the state superintendent—"to survey the entire junior college field with a view to formulating a junior college program adapted to the State of Washington," and (2) that the State Board of Education be requested to supervise and accredit the junior colleges functioning in the state of Washington. To meet expenses incidental to the investigation authorized, an appropriation not to exceed \$250 was made.

NEW LIBRARIAN APPOINTED

Coit Coolidge has been appointed librarian of the Edward C. Harwood Library of the new junior college building of the Chaffey Junior College of Ontario, California, to begin work April 1. Mr. Coolidge is now librarian of the University Club Library in New York City.

DEANS OF WOMEN

For the first time in its history the National Association of Deans of Women placed a section dealing with the junior college on its annual program. Dr. J. M. Wood, of Stephens College, spoke on the "Junior College and Its University" and Mrs. Virginia J. Esterly, formerly Dean of Women at University of Oregon, discussed "The Junior College as an Independent Institution." This year the National Association is making a special effort to bring its work to the attention of junior college administrators.

EDUCATION IN NORWAY

The first Office of Education study since 1922 of an educational system of a foreign country appears as Bulletin (1930) No. 17, *Secondary Education in Norway*, by Gabriel E. Loftfield, Mount Vernon Junior College, Mount Vernon, Washington.

FOOTBALL IN HAWAII

During November the football team of Chaffey Junior College, Ontario, California, journeyed to Hawaii, where they played and won two games with Kamehameha University and McKinley High School. Last year the Pasadena Junior College team made a similar trip to the Hawaiian Islands.

GRAYS HARBOR JUNIOR COLLEGE

Grays Harbor Junior College of Aberdeen, Washington, the youngest college in the state, had an enrollment of 102 freshmen for the fall quarter. The faculty consists of five full-time and three part-time professors, all with Master's degrees or higher scholastic training. Seven courses of study approved by other colleges and universities are being offered. This makes four public junior colleges which have developed in Washington prior to any authorization of them by state law.

A CORRECTION

President C. C. McCracken of the Connecticut Agricultural College writes that his institution was recently admitted to membership in the New England Association of Colleges and Secondary Schools as a four-year college, not as a junior college, as was stated in the account of the meeting of the New England Junior College Council which was published in the January *Journal*.

YAKIMA VALLEY JUNIOR COLLEGE

Yakima Valley Junior College at Yakima, Washington, now in its third year, has had a very substantial increase in enrollment and has a wider distribution of students than in either of the previous years. Among the 131 students registered for the first two quarters, there are

representatives from thirteen high schools in the Yakima Valley, besides students from Oregon, Idaho, California, and Minnesota. The third-quarter registrations will increase the total.

On June 13, 1930, the first class—eleven young women and ten young men—was graduated. Members of this class were accepted as juniors by the University of Washington and State College of Washington. The state normal schools have also fully accredited the work of the college.

There is, too, this year a greater community interest in the work of Yakima Valley Junior College. Evening classes for adults have widened the circle of its acquaintances, and invitations from clubs for speakers and musical programs are evidence of a desire to know more of its work. The most tangible evidence of interest has been gifts of money, books, pictures, and laboratory equipment. The Chamber of Commerce has a standing junior college committee to work with the Yakima Valley Junior College Board in building up the institution.

DESTRUCTIVE FIRE

In the greatest disaster that has visited the school since its establishment in 1909, the Administration Building of the State A. and M. College at State College (Jonesboro), Arkansas, was completely destroyed by fire Monday, January 11. The fire which destroyed the historic structure was of completely unknown origin. The loss of the building and the fixtures, which were a complete loss except for the vault containing the records and the cash vault, was estimated at between \$170,000 and \$175,000.

Two phases of the loss that will be felt most by the present student body are the destruction of the library and the physics and chemical laboratories. However, new library books have been ordered and new laboratories are being constructed.

Records of approximately 20,000 students who have attended the institution since its establishment were recovered intact from the ruins.

CONNECTICUT BUILDING

At the Junior College of Connecticut construction of a permanent brick addition is under way to give a larger student capacity and better facilities for teaching of sciences. The new building is to have a basement and two stories. The basement will contain a men's locker and shower room with sixty-four lockers and twelve showers. Also in the basement will be the women's quarters, consisting of a locker room with fifty-five lockers, a shower room with ten showers, and ten dressing rooms. However, the shower equipment will not be installed until the gymnasium is built.

On the first floor there will be two physics laboratories. The larger one, which will be situated at the end of the chemistry room, will be 30 by 30 feet. Folding doors will open into another, which will be 19 by 30 feet. Both these laboratories will have concrete floors.

On the second floor there will be a temporary assembly hall, which will be 30 by 42 feet. Later, when the permanent assembly is built, this room will be divided into classrooms. On this floor also there will be a faculty room, 12 by 22 feet.

The new building will be in use as soon as it is completed. It should be finished in about two months.

Across the Secretary's Desk

DAVID MACKENZIE

When the National Conference of Junior Colleges met in St. Louis, June 30, 1920, the thirty-four representatives present decided to effect a permanent organization. On the following day officers were elected and committees were appointed to prepare a constitution and by-laws.

The first president of the new organization, later to be called the American Association of Junior Colleges, was David Mackenzie, then dean of the Junior College of Detroit. Dean Mackenzie served as president of the Association during its organization period and was responsible for the second meeting, which was held in Chicago in February 1921. At that meeting he was made chairman of the Committee on Standards, which was asked to report at the next meeting.

At the Memphis meeting, March 1922, Dean Mackenzie's committee made its report, which represented the first combined effort of junior colleges to produce junior college standards. The standards presented at that time remained unchanged until 1925.

Due to the fact that the Junior College of Detroit became a four-year college in 1923, Dean Mackenzie never attended the meetings of the Association after the 1922 meeting. His brief membership in the Association, however, and his administration as president during its organization have left their impress upon the junior college movement. Dean Mackenzie died on July 16, 1926.

The following account, quoted from the *Collegian*, the weekly publication of the College of the City of Detroit, indicates something of the esteem in which he was held by those among whom he worked:

"The story of Dean Mackenzie's life

is the story of the College of the City of Detroit, and a big part of the story of educational development in Detroit and Michigan in general.

"David Mackenzie was born in Detroit in 1860. His father was a Scotchman of Covenanter background, stern and severe, and his mother a cultured woman who had traveled widely and spoke several languages. She influenced the boy in his choice of books, by her knowledge of unfamiliar countries, and in her regard for the life of the mind and spirit. In his later years these influences still abided with him. He became so completely a student and so excelled in his chosen field of the classics that in 1881 he was graduated from the University of Michigan with both the A.B. and A.M. degrees, and for many years served as treasurer of his class. When Phi Beta Kappa was established at Michigan, he was one of the first five to receive the key of honor. Even in his last busy years he found time to read his Greek and Sanskrit. He spoke French and German with fluency.

"Mr. Mackenzie's desire as a young man was to enter the field of medicine, probably because of an impaired thyroid which gave him keen personal interest in all glandular afflictions and helped him to interpret the attitude of many of his students and give them personal help, but circumstances placed him in the teaching fields and made him 'a physician to minds rather than bodies.'

"His first teaching was done in Fenton, later in Flint, then in Muskegon, and finally in Detroit. In Muskegon, where he became superintendent of schools, he established the first manual training school in the state. While in Flint he met and later married Miss Esther Orrell, who survives him.

"In 1904, Mr. Mackenzie was called to take the principalship of the Central High School in Detroit. This school grew and flourished under him until it was not only one of the largest, but one of the best, in the United States. It became the source of principals and teachers for other high schools as they were opened throughout the city, and Central's spirit became the spirit of these schools in their earlier years. Mr. Mackenzie instituted the policy of segregated assembly rooms for boys and girls and fostered the activities and idealism that could be developed in these groups. Many of the Central rooms chose Greek names and mottoes because of his love of the Greek civilization.

"In 1915 the Junior College came into being through the increased demand for higher training of students, and the Board of Education promoted Mr. Mackenzie to the deanship of the Junior College. Its success was such that a demand for a four-year college became more and more insistent and in 1923 the legislature granted the Board of Education the right to confer the A.B. and B.S. degrees. Two years later, when the first degree class was graduated, Dean Mackenzie's dream of a lifetime had reached fulfillment."

DOAK S. CAMPBELL, *Secretary*

CALIFORNIA FACTS

The December issue of *California Schools* contains a statistical summary of educational data for the state for the school year 1929-30. With reference to junior colleges, it shows an average daily attendance of 8,568 in the district junior colleges and 3,094 in the junior college courses of high schools. The enrollment reached a total figure of 20,561, including special students. The number of principals and instructors employed in the district institutions was 518.

STANFORD RECEIVES GRANT

A grant of \$100,000 over a period of five years has been made to Stanford University by the General Education Board. The grant is to further the development of a program of independent study. In commenting on the award, Dr. Swain, acting president, said: "Stanford offers three advantages for this new movement in higher education. It has a highly selective student body. It has developed, in the citizenship and other work in the freshman year and in the independent study plan for the upper division, a means by which during the past five years a beginning has been made in education for the individual student. And finally in the state of California, and particularly at Stanford, there is interest in the development of new methods for handling instruction in junior colleges and in setting standards for the admission of junior college students into the upper division. The grant of the General Education Board will make possible during this five-year period a marked development in the preparation of individual students, particularly in the first two years of their college work. Plans for the new work now under consideration will go into effect during the current academic year."

LIBRARY MEETING

The annual conference of the American Library Association will be held at Yale University, June 22-27. The Junior College Round Table, of which Miss Ermine Stone, of Sarah Lawrence College, is chairman, will have at least two sessions. The exact time and the program will be announced later.

Reports and Discussion

MINNESOTA DEANS MEETING

The second meeting of Deans of Public Junior Colleges of Minnesota was held at the University of Minnesota on the afternoon of October 31, 1930. All the junior colleges were represented except Duluth.

The chief topic of discussion was the relation of the junior colleges to the College Aptitude Test given to high-school seniors by the colleges of Minnesota. Dean J. B. Johnston of the University, chairman of the committee in charge of the testing, made a statement concerning the test program to be carried out in the high schools in the spring of 1931. After some discussion concerning the value of the test to the junior colleges, Dean Johnston was requested to prepare an estimate of the cost to the junior colleges if they participated in the program.

Dean Goddard presented a brief report concerning assistantships in summer session which might be open to junior college instructors and a supplementary statement was made by Mr. Shumway, chairman of the Committee on Relations of the University to Other Institutions of Learning. It was voted to request the University to offer some special assistantships to junior college instructors at \$25 each for the summer session of 1931.

Mr. Shumway presented a report concerning the possibility of giving a uniform test throughout the junior colleges and the University in some standard junior college course. The group voted its approval of the plan and requested the committee to continue its investigation of the possibility of putting it into operation.

The group also discussed the possibility of making an investigation of the performance of students from various junior colleges of the state in the

senior colleges of the University as well as the problem of sabbatical leaves for junior college instructors. Action was postponed until more complete information concerning what had already been done in regard to these matters could be secured.

ROYAL R. SHUMWAY,
Secretary

GEORGIA ASSOCIATION ORGANIZED

Another state association of junior colleges has recently been organized with the sixteen junior colleges of the state of Georgia as charter members. The Chancellor of the University of Georgia called a conference of all the junior college presidents and deans at the University in November 1930 with Dr. L. L. Hendren, chairman of the Advanced Credit Committee, in charge of the program. Every junior college in the state was represented. Dr. Hendren presented a number of studies about the junior colleges of the state. A permanent organization of the junior colleges was made with President J. L. Skinner of the Junior College of Augusta as president; J. M. Thrash, president of the South Georgia Junior College as vice-president; and President T. J. Lance of Young L. G. Harris College as secretary-treasurer.

The first meeting of the permanent organization was held in Atlanta, Georgia, January 30, 1931, with every junior college in the state represented. Following are the charter members of the organization: Gordon, Middle Georgia, Young L. G. Harris, Emory, Oxford, Valdosta, Augusta, South Georgia, Brewton Parker, Americus Normal, Andrew, Reinhardt, Georgia Industrial, Burke County, Norman Park. Dr. Doak S. Campbell was present at the sessions of the conference and added much to the program.

Constitution and by-laws were adopted; the conference joined with the senior college association in a part of their program. The junior college movement in Georgia is very pronounced. There are seventeen hundred students in all the junior colleges of the state.

T. J. LANCE
Secretary

SOUTHERN ASSOCIATION MEETING

The Association of Colleges and Secondary Schools of the Southern States, at its annual meeting in Atlanta, Georgia, December 1-5, 1930, instituted a new movement to promote the development of junior colleges within its territory embracing the coastal states of Virginia through Texas, Tennessee, and Kentucky. The office of "Junior College Adviser" was created in connection with the work of the secretary of its Standing Committee on Junior Colleges; the secretary, Dr. George P. Butler, formerly president of the Junior College of Augusta, Georgia, was employed in both capacities. His headquarters are now at the University of North Carolina, Chapel Hill, N.C., where he will give a graduate course in the 1931 summer school on Junior College Organization and Administration. This course will be designed to have the utmost practical value to administrators and instructors now at work and to others preparing to enter these professional fields.

At this meeting two additional junior colleges were admitted to membership in the Association. They were Sunflower County Junior College, Moorhead, Mississippi, and Brownsville Junior College, Brownsville, Texas.

SOUTHERN ATHLETIC CONFERENCE

The Southern Intercollegiate Athletic Conference in session at Chapel Hill, N.C., in December, passed an amendment to their constitution, declaring graduates of accredited junior colleges eligible for varsity teams of the Conference, without the requirement as heretofore that a full year must elapse

after admission to the higher institution following graduation from junior college. Formerly, such graduates entering with rating above freshman, were ineligible for these teams also; frequently, they became discouraged as athletes and abandoned altogether their athletic activities. The Conference has discussed this matter for two years previously, but has declined to act upon it until now. The Southern Intercollegiate Athletic Association, embracing most of the smaller institutions of the South, adopted a similar rule several years ago.

SOUTHERN PRESS ASSOCIATION

The Southern Junior College Press Association will meet at the Western Carolina Teachers' College at Cullowhee, N.C., May 8-9, 1931. The Association was organized last year under the direction of the faculty advisers and the student editors of student publications at Biltmore Junior College, Biltmore, N.C. The association is the first of its kind ever to be organized in the South. Nelson Jarrett of Mars Hill College is president of the association, and Miss Edith Downs of Cullowhee is secretary. Silver cups will be awarded to the publications which are judged to be best represented at the meeting.

A DELAYED "IMPRESSION"

Two things in particular impressed me favorably during the convention of the American Association of Junior Colleges at Berkeley in November.

The first was the recognition of the fact that the problems to be met by the various types of junior colleges preclude the making of inflexible standards to which all types should conform, together with an effort to arrive at such general standards as would be most helpful and suggestive.

The second favorable impression I received was due to the emphasis placed upon experimental work and research in the junior college field.

MARY ROSE PROSSER
COTTEY JUNIOR COLLEGE, MISSOURI

AN OPEN LETTER—AND A REPLY

The correspondence printed below concerns the address, "The Junior College—What Manner of Child Shall This Be?" given by Walter C. Eells at the meeting of the American Association of Junior Colleges at Berkeley, November 19, 1930.*

THE LETTER

STEPHENS COLLEGE, MISSOURI
November 29, 1930

DEAR MR. EELLS:

The necessity for catching a night train prevented my participating in the discussion that must have followed

* The following exchange of messages gave permission for the printing of Dr. Wood's open letter in the *Journal*:

DEAR DR. WOOD: December 20, 1930

As I stated in my paper at Berkeley, I feel that the best progress can result from the full and frank discussion of such questions as my paper raised. I think that all truly scientific educators are anxious to have as much light as possible thrown upon all sides of such questions. It seems to me, therefore, that it might be an excellent thing to print your "open letter" in the *Junior College Journal*. I should be glad to have it in the March issue if this is agreeable to you.

Very truly yours,
WALTER C. EELLS, *Editor*

DEAR DR. EELLS: January 7, 1931

It will be perfectly all right so far as I am concerned for you to publish in the *Journal* the letter that I wrote. It came, not as an answer to your article, because I had only the skeleton of what you said before me. I felt, however, that a protest should be registered by those of us who have advocated the necessity of breaking down the old stereotyped form of administration in favor of the content point of view. The men to whom copies of the open letter were sent were the president and former presidents of the American Association of Junior Colleges and some of the California junior college men who seemed quite disturbed about the possible consequences of your address.

Sincerely yours,
JAMES M. WOOD

your interesting but rather remarkable paper. Even at this distance I find it rather difficult to decide whether you were indulging in a bit of satire or whether you were really in a serious vein.

One is even more perplexed when an examination of the arguments advanced reveals the fact that they might, almost without exception, be used with equal or even greater force against the truncated and decaying two-year unit that you advocated. Merely to illustrate, may I cite your psychological argument wherein you charge the advocate of the four-year junior college with disregarding the findings of experimental psychology in favor of G. Stanley Hall. Is it not true that the institution from which the two-year junior college unit was derived and which persists to this day in defining just what the junior college shall be, is devoting its energies to a defense of ideas, many of which antedated the old faculty psychology?

Again, you cite the legal legislation to prove that the four-year unit would encourage the discontinuance of school work at the end of the lower four-year unit which would bring the student normally to the age of sixteen. At the same time you inform us that the tendency is to increase the legal age to seventeen and eighteen years, which would bring the student to the middle of the second four-year unit and by analogy would encourage him to remain in school for the remaining two years of that unit.

The thesis upon which your entire arguments are based sounds strangely like the decree handed down to the junior college twenty years ago by universities and accrediting agencies:

"The Junior College is an institution offering two years of instruction of strictly collegiate grade. This curriculum shall include those courses usually offered in the first two years of the four-year college; these courses must be identical, in scope and thoroughness, with corresponding courses of the standard four-year college."

Had you recognized the fact and admitted, as in all candor you must, that this requirement not only is responsible for the overwhelming preponderance of the two-year institution that you pointed out, but that it has been the stumbling block in the way of rational experimentation in the junior college field, your entire body of arguments would crumble.

In fact, one surprise of the evening was to find you among the ninety-five per cent of those who put Galileo to death and laughed Columbus to scorn. The latter failed to discover a new route to India but he knocked a whale of a hole in the crust of medieval scholasticism. May not the revolution of the secondary-school men cause a similar disaster to the smug complacency of modern textbook institutionalism?

Another thing about your discussion that I find difficult to understand is your failure to point out the fact that the very men in the junior college field who have called into question the *ipse dixit* that created the two-year unit have announced time after time the experimental nature of their work. Shall they be censured because they refuse to accept without question a decree that not only makes the junior college a mere feeder to the upper division of the senior college or of the professional school of the university, but that likewise thwarts every effort to adjust this curriculum to the needs of the local constituency?

So far as I know, neither Superintendent Sexson with his 6-4-4 experiment, Superintendent Melcher with his 6-3-3, nor Superintendent Prunty with his 6-6 has ever registered a dogmatic statement, nor has Stephens College ever claimed to be more than the voice of one crying in the wilderness. While it is using the four-year unit for its curriculum experimentation, it is committed to no set form of organization. In fact, it would extend President Wilbur's "four-year fetish" to the two-year, three-year, the six-year, or any other. *The determining factor should*

be the accomplishing of a given task and not the time spent.

You ask what manner of child the junior college is to be. I am inclined to the opinion that unless the junior college and the other men in secondary-school work provide it with vital organs quite soon, it will be still-born.

I am taking the liberty of making this an open letter to some of the men who were at the conference since I did not have an opportunity to express my reaction to the paper on the floor of the Association.

With best wishes to you personally, I am,

Sincerely yours,
JAMES M. WOOD

THE REPLY

January 31, 1931

DEAR DR. WOOD:

In replying to your open letter, first let me assure you that I would not take the time nor the occasion of a national junior college convention to "indulge in a bit of satire." I was thoroughly in earnest in my paper at Berkeley. It represented the result of months of careful study and consideration in the most "serious vein." Mistaken in my views, I may be, but certainly not satirical nor insincere.

A careful re-examination of my arguments fails to indicate to me how they can be used with equal or even greater force against the "truncated and decaying two-year unit." If it is true, however, those who differ with me will doubtless not be slow to use them with force and vigor. Perhaps it is correct to speak of the two-year junior college as "truncated," a word which suggests the method of origin of many of the private junior colleges. I see nothing inherently undesirable in the term any more than in the truncated six-year elementary school. Most of the public institutions, however, represent a process of growth, of elongation, rather than truncation. I cannot help but wonder whether it is quite

accurate to use the term "decaying" when many of the strongest and most vigorous junior colleges in the country today are of the two-year type.

I think a re-reading of my address as printed in the proceedings of the convention will show that I did not charge the advocates of the four-year junior college with disregarding the findings of experimental psychology. I merely pointed out that there were two schools of psychological thought, and tried quite impartially to examine the implications of each in turn as applied to the argument for the four-year junior college.

Neither does it seem to me that I was inconsistent in the use of age data. I pointed out that average age was not a highly significant factor, due to great variability in age distribution. Two-thirds of the states, as I indicated, still have the sixteen-year limit. If any apparent inconsistency could be read into my argument, however, it would apply equally to the age argument as used for the four-year college. If the four-year college is desirable because sixteen years is the legal attendance age, it could not be equally so if the legal age were changed to eighteen. I still feel, though, that the matter of age is not a highly significant factor.

I cannot see where my entire body of arguments would crumble if it were not for the support of university accrediting commissions. As I understand it, the university was primarily concerned in assuring itself that students who should later transfer to upper division work should be thoroughly and adequately prepared. From this standpoint it was quite right that they should insist upon work which should be equivalent in scope and thoroughness to that done in their freshman and sophomore years. (I am quite ready to grant that "identical" is too strong.) I do not see that these standards prevent institutions from experimenting with one or two years of high-school work also. This is being done in California and other states

without change of legal standards or university accreditation. I also note that the latest standards adopted by the American Association of Junior Colleges, the result not of outside dominating pressure from the university, but evolved from ten years of experience of the junior college leaders themselves, define both two-year and four-year junior colleges, and provide in the case of both types that they shall offer work "equivalent in prerequisites, methods, and thoroughness to that offered in the first two years of an accredited four-year college."

I do not see in these and similar requirements any implication that the junior college must be exclusively "a mere feeder to the upper division of the senior college." If it is to serve, in part, as a feeder it must of course be a good one. The university, however, is not primarily concerned with the way it performs the other functions which are so important for it in addition to its preparatory one—namely adult, extension, and terminal or semi-professional types of education. It is not the university function to prescribe standards for such work with the product of which it is not directly concerned. But it does not object to them. In California the state university is urging the development of such work, even to the extreme of possible exclusion of all emphasis on preparatory work.

As far as I can find in my address I did not suggest that any of the three gentlemen you name had been dogmatic in any sense. Only one of them was mentioned and I particularly commended his statement of openmindedness, which I quoted in my closing paragraph. I was trying to deal in facts and arguments, not in personalities. Dogmatism is utterly out of place on either side of a discussion of this type. Information, scientific experiment, and experience are needed on both sides. I pointed out that I would welcome more experiments of the four-year type, but I am inclined to object

to the almost-dogmatic assumption on the part of some of the six-four-four advocates that theirs is the straight and narrow path to educational salvation. It should be recognized, as Superintendent Sexson does, that it is as yet frankly experimental.

To us in California, at least, it seems a little incongruous to connect the term "still-born" with a movement which Dr. Cooper has recently characterized, after its twenty-one years of existence in California, as having reached the period of "early manhood." It is no longer the conditions of birth but the manly development of the vigorous junior college movement with which we are concerned. It seems to have made a fair survival record so far for an organism devoid of "vital organs."

I am afraid I do not quite understand your reference to Galileo. According to my encyclopedia he died a natural death at the ripe old age of 78. I think I shall be quite willing to retire from junior college discussion if I am fortunate enough to reach an equal age. After reading all of the extensive literature in favor of the six-four-four plan and the very scanty publications on the other side of the question, I had supposed that mine would be the voice of one crying in the wilderness. I am glad to know, however, in conclusion, that you and I can agree in feeling that that phrase, at least, is applicable to both of us!

Very truly yours,
WALTER C. EELLS

ANOTHER BERKELEY IMPRESSION

I went, I listened, and I was—disappointed.

Where? To the national convention of the American Association of Junior Colleges at the Claremont Hotel, Berkeley, California, November 19 and 20, 1930.

To what? To the leaders in the junior college field and to the leaders in allied fields. To the men who are on the ground floor of junior college de-

velopment and who know the problems which that development faces.

Why was I disappointed? Not because the convention as a gathering of educational leaders failed to impress me as it should, because it printed its impression deep among my educational foundations. I was disappointed because I sincerely feel that every single individual directly connected with junior college work came to that convention with one paramount question weighing heavily upon him: How can we handle the terminal phase of the junior college work? Was that question raised? Hardly.

Is one justified then in feeling disappointed when the men whose chief concern should be the threshing out of their major problems at a gathering of that kind pass it up almost completely? Do they feel that the situation is hopeless? Surely they realize that the present trend cannot continue indefinitely. By the present trend I mean the tendency of more and more junior college students to ignore terminal courses and take university preparatory work. Does not this situation present a serious threat to the future of the junior college? Is there really a place in American education for the junior college if its sole function is to prepare students for the upper division of the senior colleges and universities?

In only two instances was the problem of terminal instruction mentioned on the entire program, those instances being Dr. Sproul's address and that of Mr. Crawford, of Johnstown, Pennsylvania. Through personal interviews with leaders of eight different junior colleges scattered from Havre, Montana, to Riverside, California, I find that in every case terminal courses are offered but the students do not elect them. With a shrug of the shoulders these leaders say, "You can't make them take a subject or a course unless they want to."

Apparently then, we are headed toward the wrong goal line simply be-

cause we find it easier to run in that direction. And it seemed to me that the junior college leaders assembled at Berkeley were playing exactly that kind of a game. They chose to run, with the student as a football, toward the door of the university, when the rules of the game imply that to win, the junior college must push the ball across the opposite goal—the threshold of life in an economic sense.

In searching for something to do with all the boys and girls whom we have by their achievement records in high school classified as average or slow individuals mentally, we discover that twentieth-century industry has produced new strata of requirements. We call these new requirements semi-professional and include within them a multitude of labors midway between the superintendent and the man with the shovel or the pitchfork. The records of practically every business will show a demand for one man on the level of the superintendent, about four at the middle level, and a rapidly diminishing number at the bottom. To this middle level modern industry has built a rather high step of approach—one made difficult through the lack of the apprentice ladder. What then could be more natural than to train these thousands of unrecommended students to better fill these positions in the semi-professions?

So we establish junior colleges in which to train the people who will never go through college to fill places in life which they are especially fitted to. Since this training can be accomplished in less time than can professional training, the work can be completed in two years after high-school graduation. In other words, the Italian ditch-digger's son has grown up and is graduating from high school. The city now uses a steam shovel for ditch digging and Tony holds his job only as a reward for twenty years of faithful service. Tony Junior failed of recommendation to college and English, history, algebra,

Latin, and football give him a poor foundation for applying for almost any kind of a job. Two courses are open to Tony Junior. He can go to the local junior college and in two years complete the course in floriculture which carries with it a position as head gardener at the Highbrow Estates, or he can go in with Tony's cousin and make wine and peddle it to his old high-school friends. But Tony Junior has grown to look with disfavor on the wine business. It involves principles which he has come to loathe.

He decides on going to junior college and goes up for registration. He meets the boys with whom he graduated last June. "What course is he taking?" Floriculture. "Why take that?" He has the promise of a good job on completion of the two-year course. "But, you poor sap, don't you know you can't enter any of our leading universities if you take that? And what's more the Stigma News have a national ruling which prevents their pledging a man who isn't going on to college." Since Tony Junior is a good football man the Stigma News want Tony Junior and since Tony Junior is human he wants to make Stigma New. Since Tony Junior doesn't care to eliminate himself from everything which at that propitious time appears worth while, he decides perhaps he had better take the college preparatory work.

He takes more English, more mathematics, more language, more science, and more football, but during the two years the favored universities fail to change their minds about Tony Junior. He has only two years of conference competition remaining now; so the school up north that made such a promising proposition two years ago has cooled off. He again applies for a job but his credentials are no better than they were two years before. Moreover, Tony Junior has acquired habits of going places and doing things. Tony Senior can hardly scare up sufficient money to keep his fine college boy

going with the crowd. And Tony Junior's girl thinks he should have a car. So Tony Junior decides perhaps he had better go in with his cousin and clean up some cash and we bid adieu to Tony Junior.

The countless Tonys being annually turned out of the junior colleges present the problem which, in my opinion, should have been the chief topic of discussion at the convention and upon which the entire body should have been made a research committee for investigation during the next year and the years to follow.

And because it was not done—I was disappointed.

W. A. RINEHART

SANTA BARBARA, CALIFORNIA

TO SELECT BEST ARTICLES¹

America's leading specialists in education will select the most important articles published in their respective fields for the Office of Education's *Record of Current Educational Publications*, according to an announcement by William John Cooper, United States Commissioner of Education.

For eighteen years the *Record* of the most important articles in seventy-nine different phases of education has been prepared in entirety every three months by the library division of the Office of Education. Now the seventy-nine phases of education covered have been divided into fourteen major groups. An outstanding specialist in each of the fourteen fields has been invited to submit quarterly a list of the notable articles in his particular field appearing in educational magazines, important books, reports, proceedings, and other publications. Their first selections for the quarter, October to January, were expected from the press in February.

The educators who have offered to help the Office of Education make the *Record of Current Educational Publi-*

cations a highly selected list of best thought in the educational press, and the sections on which they will report, are: Dr. Arthur J. Klein, Professor of School Administration, Ohio State University, who will submit articles published in the field of Collegiate and Professional Education; Dr. W. C. Ells, Associate Professor of Education, Stanford University, Junior College; Dr. L. V. Koos, Professor of Secondary Education, University of Chicago, Secondary Education; Dr. Ernest Horn, Professor of Elementary Education, University of Iowa, Elementary Education; Miss Edna Dean Baker, President National College of Education, Evanston, Illinois, Nursery-Kindergarten-Primary Education; Dr. Carter Alexander, Professor of Education, Teachers College, Columbia University, Public School Administration; Dean M. E. Haggerty, School of Education, University of Minnesota, Educational Psychology; Dr. E. S. Even-den, Teachers College, Columbia University, Teacher-Training; Edwin Lee, Director Division of Vocational Education, University of California, Vocational Education; Alonzo G. Grace, Assistant Director Division of Extension Teaching, University of Rochester, Adult Education; Miss Elise Martens, Specialist in the Education of Exceptional Children, United States Office of Education, Education of Exceptional Children; Dr. James F. Abel, Chief Division of Foreign School Systems, United States Office of Education, Foreign Education; Dr. Ambrose Caliver, Specialist in Negro Education, United States Office of Education, Education of Negroes; and Miss Martha McCabe, Assistant Librarian, United States Office of Education, Proceedings, Summaries, Courses, etc.

In adopting this method of collecting data for the *Record of Current Educational Publications*, the Office of Education expects to produce a list of writings covering completely and qualitatively every branch of education.

¹ Memorandum for the Press, as furnished by the United States Office of Education, January 1931.

Judging the New Books

Edited by John C. Almack, Stanford University

WILLIAM S. GRAY, ed., *The Junior College Curriculum*. University of Chicago Press, Chicago. 1929. 261 pages.

This is Volume I of *Proceedings of the Institute for Administrative Officers of Higher Institutions*, which was organized at the University of Chicago in 1927. Nineteen contributions are published, with a selected, annotated bibliography by L. Belle Vogelein. Judd has a chapter on psychological characteristics and the curriculum, Bobbitt a chapter on general principles, Oppenheimer a chapter on particularized techniques, Kefauver a chapter on guidance; Bastin takes up the geology curriculum, Rothschild deals with art, and Faris with sociology. Stephens College makes four contributions.

The line of argument in chapter i is approximately as follows: Generalizations are good for immature students; junior college students are immature, therefore they should be taught survey courses such, may we say, as are being and have been developed at the University of Chicago. Chapter ii contains two lines of argument. One is to the effect that we have no guiding principles for the junior college. They can be derived, but before they can be derived inductively, they must be formulated as working hypotheses. The chief hypothesis offered is derived by arguing (1) education is experience in living, (2) living is general experience, (3) education should be general.

Chapters xviii and xix bear an interesting contrast. The first deals with art, the second with sociology. In chapter xviii, the idea is that the junior college is presumably a period of orientation in which the student is

seeking to discover a specialty. He is expected to find his specialty by taking general courses. While one might normally expect, in line with the purpose, great stress upon creative work, practice, and exploration, as a matter of fact, the outline indicates history of art, philosophy of art, appreciation of art, and survey of art. In sociology, the approach is from live problems to their solution. The data, however, are obtained from textbooks. The reviewer fears that indoctrination is just as likely to result here as in a lecture or in a textbook course. In other words, the sources, not the method, determine the kind of results. Nevertheless, it seems to be the freshest and most scientific approach described.

The limitations which the reviewer sees in *The Junior College Curriculum* may best be expressed by a personal statement. Education is a dynamic process. In its best sense, *it is progress*. Progress is the discovery, diffusion, and application of science. If one divides this process, he may be sure he cannot produce an educated man. All these activities may well be activities of the junior college. With the conclusions that life is generalized, and that junior college students should take generalized courses, the writer violently disagrees. Life is highly concrete and particularized; and, if one can trust modern psychology, a curriculum of abstractions is peculiarly unfitted to the junior college stage of development.

Such remarks are of little consequence. As a matter of fact, the book is well written, interesting, vital, and well edited. It gives a clear account of what is actually being done. It is a useful piece of work.

WILTON W. BLANCKÉ and JAY SPECK, *A Gateway to Music*. D. C. Heath and Company, Boston. 1931. 178 pages.

The preface of this book states that it is intended primarily as a textbook for beginners in the study of music theory. . . . "It should find a place in conservatories of music, *in colleges*, in private schools, and especially in public high schools."

The content is comprised in eight chapters. Chapters i-v take up the usual topics: notation, time values, sharps and flats, intervals, and minor scales. Chapters vi-vii give a description of the instruments of the symphony orchestra and of the band. Chapter viii contains twenty-seven pages of music terminology.

The reviewer has examined several beginning texts in music in the last year, covering a range of thirty years or more in time of publication. In this period, he is unable to detect any essential change in content, sequence, and method of treatment. The wording is in many instances nearly identical. To some extent, this situation arises from the nature of the subject-matter; to some extent it is due to lack of originality.

A few points of weakness other than the tendency to imitate may be pointed out. Sentences are not grouped into true paragraphs; they follow the fashion *staccato*. The treatment is not detailed and systematic, proceeding from the simple to the complex, or following an order in accord with the facts and principles of music. The result is gaps of information, incomplete teaching, and confusion in the mind of the learner.

The content is cut off from two vital sources both of content and interest. Connection is not adequately made with physics, the science upon which music rests. It is not adequately connected with composition, which is the true point of application. It is limited to performance, which is taught by

definition. Since these definitions are cut off from the basic principles, how can they have any true meaning? Lacking access to the well-spring of science on the one hand, and to the clear outlet of creative composition on the other, the student of music is condemned to mediocrity—if he continues a student of music. Most of them quit as soon as parental and legal pressure are taken off.

In two respects *A Gateway to Music* is superior. One is in the mechanical features. The printing and binding are beautiful. The second is in the two chapters which deal with the symphony orchestra and the band. Expert editorial service could have improved the style, but at least a useful type of information is supplied which is not readily available. Only in mechanical make-up would this book rate A. In other points it would rate toward the bottom of the scale. The real beginner's text in music is yet to be written.

EDWARD DANA DURAND, *American Industry and Commerce*. Ginn and Company, Boston. 1930. 653 pages.

Like other books from the Atheneum Press, one is first impressed by evidences of typographical and mechanical excellence. It is "quality" printing and publishing.

The author says that his book aims to present a general picture of American industry and commerce. He has relied "almost entirely on authoritative statistical publications," largely from governmental sources. His statistics are displayed through graphs and charts. "This method is the more appropriate because the actual data change more or less from year to year." Averages over a considerable time period are freely used. The earlier history of industry and commerce is traced only in broad outline, but the trends since the beginning of the present century are emphasized.

The book is divided into twelve chapters. In an abbreviated form, the chapter topics are: income, economic progress, factors in progress, population, natural resources, secondary factors in progress, occupations, economic geography, agriculture, mining, manufacturing, transportation, and foreign trade. There is no bibliography. There are no teaching aids.

Having in mind the constituency for whom this book is intended, the reviewer would rate it B in adaptability to local needs, A in subject-matter, E in aids to instruction, A in arrangement and organization, and A in mechanical make-up. Such a rating characterizes it as a superior book.

REXFORD GUY TUGWELL, THOMAS MUNRO, and ROY E. STRYKER, *American Economic Life*. Harcourt, Brace and Company, New York. 1930. 737 pages.

This is the third edition of a college text which appeared first in 1925. Not only are the most notable phases of American economic life treated in an interesting and concrete fashion, but suggestions are made for continuous improvement. "To us," the authors say, "what is, is of importance only because we can make of it a better future." In addition to emphasizing this dynamic and practical idea, this volume offers another difference. It has departed from the ready-made and foundationless doctrines of the old school of economists. Problems come first in this book; solutions are arrived at, not presented ready made.

A three-fold division of topics has been adopted: Books, Parts, and chapters. There are three books: I, "Present Levels of Living and How They Came to Be"; II, "Raising the Levels of Living"; and III, "Proposals for Reorganizing Our Economic System." The origins of the present economic system are given in Book I, which also treats contemporary conditions. The last section is entitled, "Toward an

Experimental Economics." "Our problems are not desperate," the writers say, "if we will surrender the philosophy of despair and attack them intelligently, accept the experimental attitude, make adjustments and changes when desirable, all may be well"—at least we shall go forward.

The writers seem to see things with uncompromising clearness, yet they cannot be called dogmatic. They content themselves with a rather clever setting forth of facts. They seem to be no more afraid of new facts than of old facts. For illustrative purposes, they quote Scott Nearing, Sinclair Lewis, Simon N. Patten, Stuart Chase, Theodore Dreiser, J. B. S. Haldane, and Thorstein Veblen. They state and describe the usual current proposals for reorganizing our economic system. A paragraph is given to Henry George. It does not indicate that the authors know the A.B.C.'s of his doctrine.

There is an abundance of illustrations. Some of them are not related to the text literally; some are far from clear. Otherwise, the work is excellent from the mechanical point of view. There is no bibliography and none of the usual "teaching and study aids." The reviewer disagrees with the implication in the statement that "a suggested solution is good only if it works" (p. 727). Whether a proposal works or not may have nothing to do with its intrinsic soundness or truth. Success in application depends not only upon the truth of a principle but upon having at hand and using the proper techniques. Applied science therefore depends upon human engineering.

On a five-point scale, with A as the highest, the reviewer rates this book as follows: adaptability to local needs, A; subject-matter, A; aids to instruction, D; arrangement and organization, A; mechanical make-up, B. There may be a little strong meat for delicate and conservative persons; but for the clear-headed, practical, intelligent type it is good medicine.

Bibliography on Junior Colleges*

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1747. BIETRY, J. RICHARD, *The Junior College in Relation to Speech Education*, Western State Teachers College, Kalamazoo, Michigan, 1930.
A mimeographed report of a study by the author, reported at the National Association of Teachers of Speech, at Chicago, December 1930.

1748. BOUCHER, C. S., "Developments in Undergraduate Education," *Journal of Higher Education* (December 1930), I, 491-96.
Outlines plans for reorganization of senior and junior colleges at the University of Chicago on a basis of achievement as measured by comprehensive examinations, rather than by courses or years of work. "If the College period, as we have defined it, is to be merely a continuation of secondary school performance, it will fail; or, if it is to be a truly university performance, it will fail; we shall endeavor to have it bridge the gap successfully for all students admitted. This gap-bridging period for most students will be two years."

1749. AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS, "Junior College Journal," *Bulletin of the American Association of University Professors* (November 1930), XVI, 524-26.
Announcement of the new *Journal* and reprint of the leading editorial from the first issue. Announcement of special committee of the Association to study the relations of junior colleges to general college and university work.

1750. BUSH, RALPH H., "Teacher Load in the Junior College," *National Education Association Addresses and Proceedings, Columbus and Atlantic City, 1930*, pp. 593-94.
Abstract of address at Atlantic City. See No. 1536.

1751. CALIFORNIA SCHOOLS, "Significant Facts Concerning California Schools," *California Schools* (December 1930), I, 318-23.
Contains considerable statistical information regarding California public junior colleges for 1929-30.

1752. CARPENTER, W. W. and RUF, JOHN, *The Teacher and Secondary Schools Administration*, Ginn & Co., Boston, 1931, 460 pages.
Deals briefly with encouragement of the junior college by the university, with extensive quotation from Ray Lyman Wilbur (pp. 315-17).

1753. COLLINS, L. M., "Junior College Developments in California," *Teachers Journal and Abstract* (December 1930), V, 530.
Abstract of article by W. E. Morgan in *Junior College Journal*, November 1930.

1754. COLLINS, L. M., "Student Interest in Junior Colleges," *Teachers Journal and Abstract* (December 1930), V, 536.
Abstract of article by W. M. Proctor in *Junior College Journal*, November 1930.

1755. COLLINS, L. M., "The Real Function of the Junior College," *Teachers Journal and Abstract* (December 1930), V, 534.
Abstract of article by W. H. Snyder in *Junior College Journal*, November 1930.

1756. COOPER, WILLIAM JOHN, "Present-day Trends in the Colleges," *Current History* (June 1930), XXXII, 514-18.
"The junior college of the new type should prove adequate for that group of 'rah-rah boys' who with little serious purpose now flood academic halls. . . . It is likely that a careful survey will reveal a place for high-grade jun-

* This is a continuation of *Bibliography on Junior Colleges*, by Walter C. Eells (United States Office of Education Bulletin [1930], No. 2), which contained the first 1,600 titles of this numbered sequence. Assistance is requested from authors of publications which should be included.

ior colleges of endowed type. . . . There are many reasons for thinking that the junior college will become general."

1757. DEUTSCH, MONROE E., "The University and the Junior College," *California Quarterly of Secondary Education* (January 1931), VI, 133-42.

An address before the Junior College Conference at Fresno, California, December 5, 1930. The relationship of the University of California to the public junior colleges is discussed in detail by the vice-president of the university.

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Delayed publication of an article giving a review of legislation affecting the public junior colleges of California as passed by the 1929 legislature.

1759. HAYDEN, F. S., "Can the Junior College Curricula Be Shaped To Meet Life Situations?" *Christian Education* (January 1931).

Discusses the dual problem of the junior college—how to meet senior college entrance requirements on the one hand and how to fit the student for practical life on the other. "The writer would strengthen the part of the curriculum that has social value. To this end he would minimize foreign languages and technical mathematics and would emphasize the social sciences. He would humanize the sciences, inspirationalize English literature, and make English composition and public speaking a medium for the expression of clear, logical thoughts."

1760. HERTZLER, SILAS, "Mennonite Schools and Colleges," *School and Society* (January 3, 1931), XXXIII, 15-16.

Includes brief information on four Mennonite junior colleges.

1761. HUNTER, KATHERINE E., *The Sheaf, 1930* (St. Louis, Mo., 1930), 144 pages.

Eighth volume of the college annual of The Principia, Christian Science junior college. Presentation of plans for development of a senior college.

1762. INDEPENDENCE JUNIOR COLLEGE, *In-kanquil, '30*, Independence, Kansas, 1930, 48 pages.

Volume five of the college annual of Independence Junior College, Independence, Kansas.

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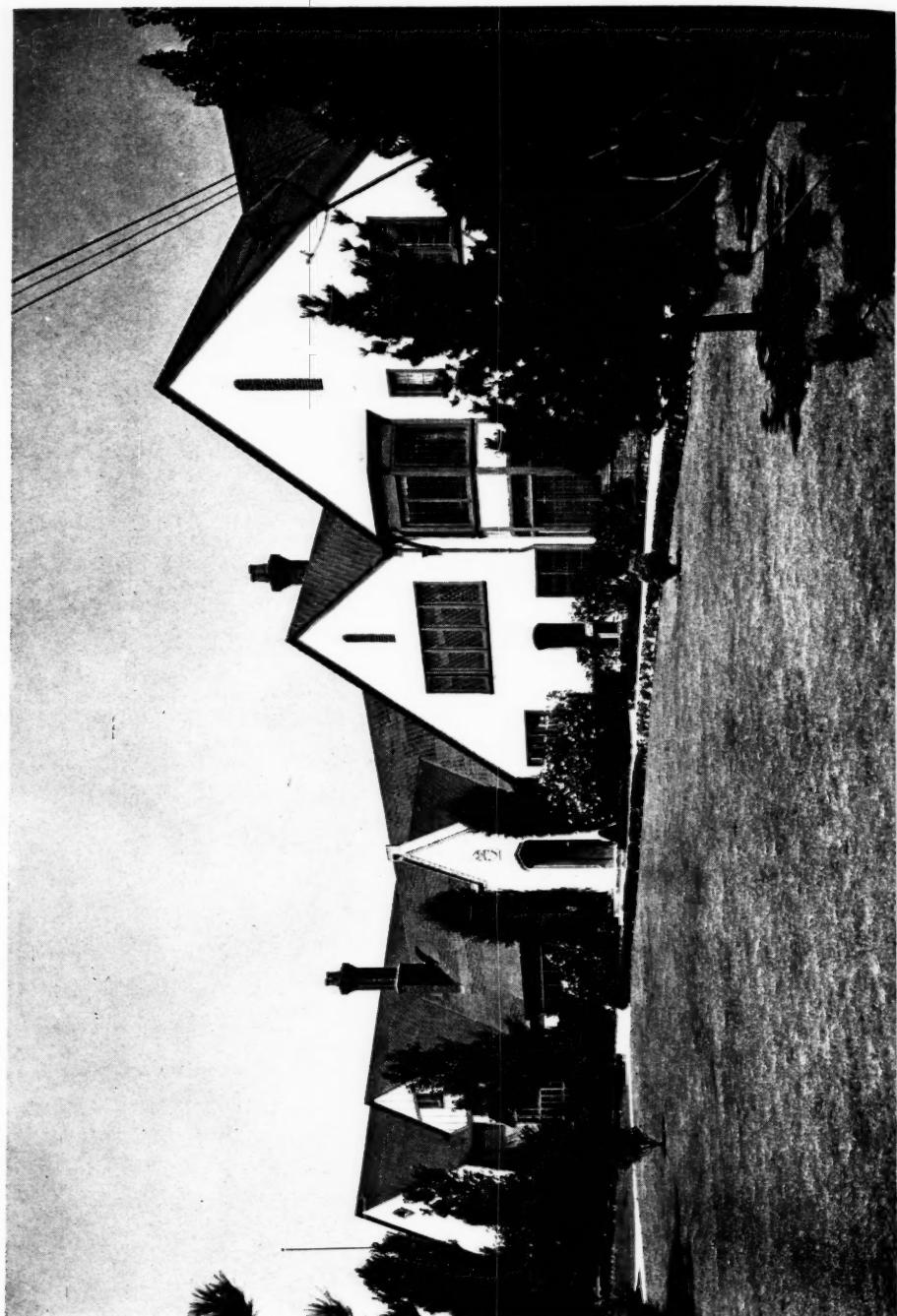
Facts that were pertinent in endowment campaign.

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